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### SEARCH REQUEST FORM

Requestor's Name: KK FONDA		71970	Serial Number:	09/650055		
Date: _		Phone: 308-1	620	Art Unit: _	1623	

Dear Examiner,

You can help us in our efforts to get searches back to you in a timely manner by including your art unit and room number on all searches you submit to the STIC. Thanks from the STIC-Biotech/Chemistry Library

Biblassignes data attached.

CM1 8319

Please search compositions+ methods of attached claims 1-48. Claims all require a "glucosamine component" -see attached page of spec. Claims 1-15 and 19-26 require cellulose while claims 16-18 and 27-48 do not.

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### STAFF USE ONLY

Date completed: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Search Site	Vendors
Searcher:	STIC	IG
Terminal time:	CM-J	A DC
Elapsed time:	Type of Search	APS Geninfo
CPU time:	N.A. Sequence	SDC
Total time:	A.A. Sequence	DARC/Questel
Number of Searchess	Structure	Other
ber of Databases:	Bibliographic	Office

=> fil reg FILE 'REGISTRY' ENTERED AT 13:37:09 ON 25 JUN 2001 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2001 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 24 JUN 2001 HIGHEST RN 343236-34-0 DICTIONARY FILE UPDATES: 24 JUN 2001 HIGHEST RN 343236-34-0

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT for details.

=> d ide can tot

L93 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN **62529-75-3** REGISTRY

CN .beta.-D-Glucopyranose, 2-amino-2-deoxy-, homopolymer (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF (C6 H13 N O5)x

CI PMS, COM

PCT Polyother, Polyother only

LC STN Files: CA, CAPLUS, TOXLIT, USPATFULL

CM ·1

CRN 14257-69-3 CMF C6 H13 N O5

Absolute stereochemistry.

Point of Contact:
Jan Delaval
Librarian-Physical Sciences
CM1 1E01 Tel: 308-4498

5 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

5 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 132:18791

REFERENCE 2: 123:349356

REFERENCE 3: 122:217080

REFERENCE 4: 108:226885

REFERENCE 5: 97:24319

L93 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN **35110-26-0** REGISTRY

CN D-Glucose, 2-amino-2-deoxy-, homopolymer (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Poly(2-deoxy-2-aminoglucose)

```
CN
     Poly(D-glucosamine)
CN
     Polyglucosamine
FS
     STEREOSEARCH
MF
     (C6 H13 N O5)x
CI
     PMS
PCT
     Polyother, Polyother only
LC
     STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, CEN, CIN,
       DIOGENES, IFICDB, IFIPAT, IFIUDB, TOXLIT, USPATFULL
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          1
     CRN
          3416-24-8
     CMF
         C6 H13 N O5
Absolute stereochemistry.
     NH2
           OH
                     OH
        OH
               OH
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              42 REFERENCES IN FILE CAPLUS (1967 TO DATE)
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                132:352792
REFERENCE
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                132:284253
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            7:
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            8:
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            9:
                132:122007
REFERENCE 10:
                129:335125
    ANSWER 3 OF 14 REGISTRY COPYRIGHT 2001 ACS
L93
RN
     29031-19-4 REGISTRY
     D-Glucose, 2-amino-2-deoxy-, sulfate (salt) (8CI, 9CI)
                                                               (CA INDEX NAME)
CN
OTHER NAMES:
     D-Glucosamine sulfate
CN
CN
     Glucosamine sulfate
     STEREOSEARCH
FS
DR
     216447-61-9
MF
     C6 H13 N O5 . x H2 O4 S
CI
                 ADISINSIGHT, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,
LC
     STN Files:
       CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, DIOGENES, EMBASE, IFICDB,
       IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, PHAR, PROMT, TOXLINE, TOXLIT,
       USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                      EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 3416-24-8 CMF C6 H13 N O5

Absolute stereochemistry.

72 REFERENCES IN FILE CA (1967 TO DATE)

4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

73 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:316083

REFERENCE 2: 134:300801

REFERENCE 3: 134:251707

REFERENCE 4: 134:251595

REFERENCE 5: 134:242620

REFERENCE 6: 134:212691

REFERENCE 7: 134:192559

REFERENCE 8: 134:133173

REFERENCE 9: 134:95044

REFERENCE 10: 134:91157

L93 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN **27555-50-6** REGISTRY

CN D-Glucose, 2-(acetylamino)-2-deoxy-, homopolymer (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN D-Glucose, 2-acetamido-2-deoxy-, polymers (8CI)

OTHER NAMES:

CN 2-Acetamido-2-deoxy-D-glucose homopolymer

CN N-Acetyl-D-glucosamine homopolymer

CN Poly(N-acetyl-D-glucosamine)

FS STEREOSEARCH

DR 99294-13-0

MF (C8 H15 N O6)x

CI PMS, COM

```
PCT Polyother, Polyother only
```

LC STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, CHEMLIST, IFICDB, IFIPAT, IFIUDB, PROMT, TOXLIT, USPATFULL

CM 1

CRN 7512-17-6 CMF C8 H15 N O6

Absolute stereochemistry.

44 REFERENCES IN FILE CA (1967 TO DATE)

6 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

44 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:140122

REFERENCE 2: 132:352792

REFERENCE 3: 132:167903

REFERENCE 4: 131:204498

REFERENCE 5: 131:173051

REFERENCE 6: 131:141365

REFERENCE 7: 130:298827

REFERENCE 8: 129:100116

REFERENCE 9: 129:86018

REFERENCE 10: 127:99649

L93 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN **14131-68-1** REGISTRY

CN .beta.-D-Glucopyranose, 2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Glucopyranose, 2-acetamido-2-deoxy-, .beta.-D- (8CI)

OTHER NAMES:

CN .beta.-N-Acetyl-D-glucosamine

CN .beta.-N-Acetylglucosamine

CN 2-Acetamido-2-deoxy-.beta.-D-glucopyranose

CN 2-Acetamido-2-deoxy-.beta.-D-glucose

CN 2-Deoxy-2-acetamido-.beta.-D-glucopyranose

CN N-Acetyl-.beta.-D-glucosamine

FS STEREOSEARCH

DR 53585-05-0, 28905-08-0

MF C8 H15 N O6

CI COM

LC STN Files: AGRICOLA, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CIN, SPECINFO, TOXLIT, USPATFULL

(\*File contains numerically searchable property data)

Absolute stereochemistry.

163 REFERENCES IN FILE CA (1967 TO DATE)
33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
164 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:1700

REFERENCE 2: 134:147784

REFERENCE 3: 134:146102

REFERENCE 4: 134:114926

REFERENCE 5: 134:113468

REFERENCE 6: 133:234323

REFERENCE 7: 133:206650

REFERENCE 8: 133:191282

REFERENCE 9: 133:79192

REFERENCE 10: 132:234330

L93 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN 9007-28-7 REGISTRY

CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Chondroitinsulfuric acids (8CI)

OTHER NAMES:

CN Chondroitin polysulfate

CN Chondroitin sulfate

CN Chondroitin sulphate

CN Chondroitinsulfuric acid

CN Chonsurid

DR 9046-20-2, 9062-29-7, 11120-14-2, 56480-79-6

MF H2 O4 S . x Unspecified

CI COM

PCT Manual registration

LC STN Files: AGRICOLA, AIDSLINE, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, NAPRALERT, NIOSHTIC, PHAR, PROMT, RTECS\*, TOXLINE, TOXLIT, USPATFULL

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 9007-27-6

CMF Unspecified

CCI PMS, MAN

#### STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 7664-93-9 H2 O4 S CMF

3771 REFERENCES IN FILE CA (1967 TO DATE) 295 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 3775 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 135:10065 1:

REFERENCE 2: 135:10063

REFERENCE 3: 135:10062

REFERENCE 135:4864 4:

5: REFERENCE 135:533

REFERENCE 135:532 6:

REFERENCE 7: 135:510

REFERENCE 8: 134:371859

REFERENCE 9: 134:371781

REFERENCE 10: 134:366731

L93 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN **9004-65-3** REGISTRY

CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 2-Hydroxypropyl methyl cellulose

CN 2-Hydroxypropyl methyl cellulose ether

CN 60SH4000F

CN 90SH15000S

CN Accel R 100

CN Benecel MP 363C

CN Benecel MP 943

CN Benecel MP 943W

CN Bermocoll E 411FQ

CN Celacol 15000DS

CN Celacol HPM 15000DS

CN Celacol HPM 450

CN Celacol HPM 5000

CN Cellulose hydroxypropyl methyl ether

CN Cesca HPC 50

CN Courlose HPM

CN Culminal 20000PFR

CN Culminal MHPC

Culminal MHPC 20000PFR CN

CN Culminal MHPC 20000PR

Culminal MHPC 2000S CN

Culminal MHPC 4000PFR CN

Culminal MHPC 6000 CN

```
CN
      DP 1208
CN
     DP 1209
CN
     EM 1100
CN
     EM 1100 (cellulose derivative)
CN
     HPM 100DS
CN
     HPMC
CN
     HPMC 20000PV
CN
     HPMC 2208
     HPMC-K 35LV
CN
CN
     Hydroxypropyl methyl cellulose
     Hydroxypropyl methyl cellulose ether
CN
CN
     Hypromellose
     Marpolose 60MP5
CN
     Marpolose 65MP400
CN
     Marpolose 65MP4000
CN
     Marpolose 90MP15000
CN
CN
     Marpolose 90MP4000
     Marpolose EMP-H
CN
     Marpolose MP 4000
CN
     MC 400
CN
     Mecellulose PMC 40U
CN
     Methocel 181
CN
     Methocel 20-231
CN
     Methocel 20-333
CN
     Methocel 227
CN
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     Methocel 228
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     Methocel 240S
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
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DR
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MF
CI
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PCT
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          (*File contains numerically searchable property data)
                        DSL**, TSCA**, WHO
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     CCI
           PMS, MAN
    STRUCTURE DIAGRAM IS NOT AVAILABLE ***
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          67-56-1
     CMF
          C H4 O
H3C-OH
     CM
           3
           57-55-6
     CRN
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C3 H8 O2

CMF

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             · 105 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
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                 135:10048
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                 135:10030
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            6:
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            7:
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REFERENCE
            8:
                 135:10011
REFERENCE
            9:
                 135:9995
REFERENCE
                 135:9936
           10:
L93 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2001 ACS
RN 
     9004-62-0 REGISTRY
CN
     Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     2-Hydroxyethyl cellulose
CN
     2-Hydroxyethyl cellulose ether
     Admiral 3089FS
CN
CN
     AH 15
CN
     AL 15
CN
     Aqualon HEC
CN
     AW 15
CN
     AW 15 (polysaccharide)
CN
     AX 15
CN
     BL 15
CN
     BL 15 (cellulose derivative)
CN
     Cellobond 25T
CN
     Cellobond 45000A
CN
     Cellobond HEC 15A
CN
     Cellobond HEC 400
CN
     Cellobond HEC 5000
CN
     Cellosize
CN
     Cellosize 4400H16
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     Cellosize DP 40
CN
     Cellosize HEC 4400
CN
     Cellosize HEC-QP 15000H
CN
     Cellosize HEC-QP 30000H
CN
     Cellosize HEC-QP 52000H
CN
     Cellosize HEC/QP-09-L
CN
     Cellosize OP 09
CN
     Cellosize QP
CN
     Cellosize QP 09H
     Cellosize QP 10000
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     Cellosize QP 100M
CN
     Cellosize QP 100MH
CN
     Cellosize QP 1500
CN
     Cellosize QP 15000
CN
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CN
     Cellosize QP 15MH
CN
CN
     Cellosize QP 3
     Cellosize QP 300
CN
     Cellosize QP 30000
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CN
     Cellosize QP 300H
     Cellosize QP 3L
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     Cellosize QP 40
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     Cellosize QP 40L
CN
     Cellosize QP 4400
CN
     Cellosize QP 4400H
CN
CN
     Cellosize QP 52000
CN
     Cellosize QP 52000H
     Cellosize QP 5200W1930X
CN
     Cellosize QR 4400H
CN
     Cellosize TJC 500
CN
     Cellosize UT 40
CN
     Cellosize WP
CN
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CI
PCT
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       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB,
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       EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
       NIOSHTIC, PIRA, PROMT, RTECS*, TOXLINE, TOXLIT, TULSA, USAN, USPATFULL,
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     CMF
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          PMS, MAN
     CCI
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            6648 REFERENCES IN FILE CAPLUS (1967 TO DATE)
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REFERENCE

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                 134:371808
REFERENCE 10:
                 134:371776
L93 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2001 ACS
     9004-34-6 REGISTRY
RN
CN
     Cellulose (8CI, 9CI)
                           (CA INDEX NAME)
OTHER NAMES:
CN
     .alpha.-Cellulose
CN
     .beta.-Amylose
CN
     3mAQUACEL
     402-2B
CN
CN
     Alicell LV
CN
     Alpha Cel PB 25
CN
     Alphafloc
CN
     Arbocel
     Arbocel B 00
CN
     Arbocel B 600/30
CN
     Arbocel B 800
CN
     Arbocel B 820C
CN
     Arbocel BC 1000
CN
     Arbocel BC 200
CN
     Arbocel BE 600
CN
CN
     Arbocel BE 600/10
     Arbocel BE 600/20
CN
     Arbocel BE 600/30
CN
CN
     Arbocel BWW 40
CN
     Arbocel DC 1000
CN
     Arbocel FD 00
     Arbocel FD 600/30
CN
     Arbocel FIC 200
CN
     Arbocel FT 40
CN
     Arbocel FT 600/30H
CN
     Arbocel TF 30HG
CN
     Arbocel TP 40
CN
CN
     Avicel
CN
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CN
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     Avicel 2331
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CN
     Avicel CL 611
CN
     Avicel E 200
CN
     Avicel F 20
CN
     Avicel FD 100
     Avicel FD 101
CN
     Avicel FD-F 20
CN
CN
     Avicel M 06
CN
     Avicel M 15
CN
     Avicel M 25
CN
     Avicel PH 101
CN
     Avicel PH 102
CN
     Avicel PH 105
CN
     Avicel PH 200
     Avicel PH 301
CN
     Avicel PH 302
CN
     Avicel PH-F 10
CN
     Avicel PH-F 20
CN
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
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CI
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PCT
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LC
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       CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DIOGENES, DRUGU, EMBASE, IFICDB,
       IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC,
       PIRA, PROMT, RTECS*, TOXLINE, TOXLIT, TULSA, ULIDAT, USAN, USPATFULL,
       VTR
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REFERENCE
            9:
                135:10020
REFERENCE 10:
                135:9877
L93 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2001 ACS
RN
     9004-32-4 REGISTRY
     Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     12M31XP
CN
     1400LC
CN
     2000MH
CN
     7H3SF
CN
     7H3SX
CN
     7H4XF
CN
     9H4XF
CN
     A 0111
CN
     A 01H
CN
     A 01L
CN
     A 01M
CN
     A 02SH
CN
     A 10M
CN
     A 50M
     AG Gum
CN
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CN
     AG Gum LV 1
CN
     AG Gum LV 2
CN
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CN
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CN

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CN
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     Ambergum 1570
CN
CN
     Ambergum 3021
     Ambergum 99-3021
CN
CN
     HIOA
CN
     Aquacide I
     Aquacide II
CN
CN
     Aqualon 12M31
     Aqualon 7H
CN
     Aqualon 7HF
CN
CN
     Aqualon 7LF-PH
     Aqualon 7M2
CN
     Aqualon CMC 12M8
CN
CN
     Aqualon CMC 7H
     Aqualon CMC 7H4F
CN
     Aqualon CMC 7H4XF
CN
     Aqualon CMC 7HCF
CN
     Aqualon CMC 7HX
CN
     Aqualon CMC 7L
CN
     Aqualon CMC 7LT
CN
     Aqualon CMC 7M
CN
CN
     Aqualon CMC 9H4F
CN
     Aquaplast
CN
     Aquasorb F-C
CN
     Aquasorb F-R
     Aquasorb FC 1/16
CN
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
     DISPLAY
     12624-09-8, 9045-95-8, 9085-26-1, 54018-17-6, 55607-96-0, 50642-44-9,
DR
     37231-14-4, 37231-15-5, 73699-63-5, 80296-93-1, 82197-79-3, 81209-86-1,
     117385-93-0, 198084-97-8, 247080-55-3
     C2 H4 O3 . x Na . x Unspecified
MF
CI
     COM
     Manual registration, Polyester, Polyester formed
PCT
     STN Files: AGRICOLA, AIDSLINE, ANABSTR, BIOBUSINESS, BIOSIS, BIOTECHNO,
LC
       CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, CSNB, DETHERM*, DIOGENES, EMBASE, IFICDB, IFIPAT, IFIUDB,
       IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
       TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VTB
         (*File contains numerically searchable property data)
     Other Sources:
                      DSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
     CM
          1
          9004-34-6
     CRN
     CMF
          Unspecified
          PMS, MAN
     CCI
    STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
     CRN
          79-14-1
     CMF
         C2 H4 O3
HO-C-CH2-OH
```

17374 REFERENCES IN FILE CA (1967 TO DATE)

```
601 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            17388 REFERENCES IN FILE CAPLUS (1967 TO DATE)
REFERENCE
             1:
                 135:10022
REFERENCE
             2:
                 135:9995
REFERENCE
             3:
                 135:9098
REFERENCE
             4:
                 135:9097
REFERENCE
             5:
                 135:9092
                 135:7403
REFERENCE
             6:
                 135:7197
REFERENCE
             7:
REFERENCE
             8:
                 135:7181
REFERENCE
             9:
                 135:6901
REFERENCE 10:
                 135:4506
L93 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2001 ACS
RN
     9000-11-7 REGISTRY
CN
     Cellulose, carboxymethyl ether (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     7H
CN
     7H (carbohydrate)
CN
     Acetic acid, hydroxy-, cellulose ether
CN
     Almelose
CN.
     Apergel
CN
     Apeyel
CN
     Carbose
CN
     Carboxylmethyl cellulose
CN
     Carboxymethyl cellulose
CN
     Carboxymethyl cellulose ether
CN
     Carboxymethylated cellulose pulp
CN
     Carmellose
CN
     Cellulose carboxymethylate
CN
     Cellulose Gum 7H
     Cellulose, (carboxymethyl) - Cellulose, ether with glycolic acid
CN
CN
CN
     Celluloseglycolic acid
CN
     CM-Cellulose
CN
     CMC
CN
     CMC 4LF
CN
     Colloresine
CN
     Duodcel
CN
     Glycocel TA
CN
     Glycolic acid cellulose ether
CN
     KMTs
CN
     Thylose
     177317-30-5, 191616-54-3, 196886-89-2, 204336-41-4
DR
     C2 H4 O3 . x Unspecified
MF
CI
     COM
     Manual registration, Polyother, Polyother only STN Files: AGRICOLA, ANABSTR, APILIT, APILIT2, APIPAT, APIPAT2,
PCT
LC
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CBNB, CEN, CHEMCATS,
       CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DIOGENES, DRUGU, EMBASE, IFICDB,
       IFIPAT, IFIUDB, IPA, MSDS-OHS, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
       TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VTB
          (*File contains numerically searchable property data)
                       DSL**, TSCA**, WHO
     Other Sources:
          (**Enter CHEMLIST File for up-to-date regulatory information)
```

```
CM
          9004-34-6
     CRN
     CMF
          Unspecified
     CCI
          PMS, MAN
    STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
          79-14-1
     CRN
     CMF
         C2 H4 O3
   0
HO-C-CH2-OH
            1864 REFERENCES IN FILE CA (1967 TO DATE)
             211 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1866 REFERENCES IN FILE CAPLUS (1967 TO DATE)
REFERENCE
            1:
                135:7192
REFERENCE
            2:
                135:6958
REFERENCE
            3:
                135:2523
REFERENCE
            4:
                134:371808
REFERENCE
            5:
                134:371776
REFERENCE
            6:
                134:369288
REFERENCE
            7:
                134:368365
                134:365760
REFERENCE
            8:
REFERENCE
            9:
                134:357411
REFERENCE 10:
                134:357388
L93
    ANSWER 12 OF 14 REGISTRY COPYRIGHT 2001 ACS
RN
     7512-17-6 REGISTRY
CN
     D-Glucose, 2-(acetylamino)-2-deoxy- (9CI)
                                                  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN
     D-Glucose, 2-acetamido-2-deoxy- (8CI)
OTHER NAMES:
CN
     2-Acetamido-2-deoxy-D-glucose
     2-Acetamido-2-deoxyglucose
CN
     2-Acetamido-D-glucose
CN
CN
     2-Acetylamino-2-deoxy-D-glucose
CN
     Acetylglucosamine
CN
     D-N-Acetylglucosamine
CN
     N-Acetyl-2-amino-2-deoxy-D-glucose
CN
     N-Acetyl-2-amino-2-deoxyglucose
CN
     N-Acetyl-D-glucosamine
CN
     N-Acetylglucosamine
FS
     STEREOSEARCH
     7132-76-5, 134-61-2, 173382-53-1, 98632-70-3
DR
MF
     C8 H15 N O6
CI
     COM
                  AGRICOLA, AIDSLINE, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS,
```

CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, PIRA, PROMT, SPECINFO, TOXLINE, TOXLIT, USPATFULL

(\*File contains numerically searchable property data) Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\* (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

4452 REFERENCES IN FILE CA (1967 TO DATE) 341 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

4456 REFERENCES IN FILE CAPLUS (1967 TO DATE) 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

135:2624 REFERENCE 1:

REFERENCE 2: 135:1634

REFERENCE 3: 135:485

REFERENCE 4: 134:371827

REFERENCE 5: 134:367107

134:365488 REFERENCE 6:

REFERENCE 7: 134:364401

REFERENCE 134:364306

REFERENCE 9: 134:363848

REFERENCE 10: 134:363777

L93 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN 3416-24-8 REGISTRY

CN D-Glucose, 2-amino-2-deoxy- (8CI, 9CI) (CA INDEX NAME) OTHER NAMES:

CN

2-Amino-2-deoxy-D-glucopyranose

CN 2-Amino-2-deoxy-D-glucose

ÇN 2-Amino-2-deoxyglucose

CN 2-Deoxy-2-amino-D-glucose

CN 2-Deoxy-2-aminoglucose

CN Chitosamine

CN D-Glucosamine

CN Glucosamine

FS STEREOSEARCH

58-87-7, 58267-75-7, 2351-15-7 DR

C6 H13 N O5 MF

CI COM

ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, BEILSTEIN\*, LC STN Files: BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE, HODOC\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS\*, SYNTHLINE, TOXLINE, TOXLIT, TULSA, USAN, USPATFULL, VETU

(\*File contains numerically searchable property data)
Other Sources: EINECS\*\*, NDSL\*\*, TSCA\*\*, WHO
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

```
OHC R R S R OH
```

3903 REFERENCES IN FILE CA (1967 TO DATE)
270 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3903 REFERENCES IN FILE CAPLUS (1967 TO DATE)
6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:9993

REFERENCE 2: 135:5011

REFERENCE 3: 135:4864

REFERENCE 4: 135:2694

REFERENCE 5:: 135:532

REFERENCE 6: 135:245

REFERENCE 7: 134:371755

REFERENCE 8: 134:363346

REFERENCE 9: 134:361368

REFERENCE 10: 134:357578

L93 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2001 ACS

RN 66-84-2 REGISTRY

CN D-Glucose, 2-amino-2-deoxy-, hydrochloride (8CI, 9CI) (CA INDEX NAME) OTHER NAMES:

CN 2-Amino-2-deoxy-D-glucose hydrochloride

CN 2-Deoxy-2-amino-D-glucose hydrochloride

CN Chitosamine hydrochloride

CN Cosamin

CN D-(+)-Glucosamine hydrochloride

CN D-Glucosamine chloride

CN D-Glucosamine hydrochloride

CN Glucosamine hydrochloride

FS STEREOSEARCH

DR 2002-25-7, 3615-52-9, 66573-21-5, 151799-45-0, 34673-29-5, 214046-22-7

MF C6 H13 N O5 . C1 H

CI COM

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMLIST, CIN, CSCHEM, IFICDB, IFIPAT, IFIUDB, IPA, PROMT, RTECS\*, TOXLINE, TOXLIT, ULIDAT, USPATFULL (\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

CRN (3416-24-8)

Absolute stereochemistry.

### ● HCl

625 REFERENCES IN FILE CA (1967 TO DATE).

14 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

625 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:528

REFERENCE 2: 134:367137

REFERENCE 3: 134:364401

REFERENCE 4: 134:357562

REFERENCE 5: 134:353524

REFERENCE 6: 134:353474

REFERENCE 7: 134:353386

REFERENCE 8: 134:340641

REFERENCE 9: 134:326680

REFERENCE 10: 134:300801

### => fil hcaplus

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This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

HCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

=> d bib abs hitrn tot 192

L92 ANSWER 1 OF 51 HCAPLUS COPYRIGHT 2001 ACS

Ι

AN 2001:397826 HCAPLUS

DN 135:532

TI Treating or preventing the early stages of degeneration of articular cartilage or subchondral bone in mammals using carprofen and derivatives

IN Evans, Nigel A.; Kilroy, Carolyn R.; Lundy, Kristin M.; Pelletier, Jean-Pierre

PA USA

SO U.S. Pat. Appl. Publ., 24 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

PΙ

GI

PATENT NO. KIND DATE APPLICATION NO. DATE
US 2001002401 A1 20010531 US 1999-283993 19990401

Treating or preventing the early stages of degeneration of articular AB cartilage or subchondral bone in the affected joint of a mammal is accomplished by administering a chondroprotective compd. I [R2 =  $\frac{1}{2}$ (C(X)(Y))nC(O)A; A = OH, C1-4 alkoxy, amino, hydroxyamino,mono-(C1-2) alkylamino, di-(C1-2) alkylamino; X, Y = H, C1-2 alkyl; n = 1, 2; R6 = halo, C1-3 alkyl, CF3, nitro; R9 = H, C1-2 alkyl, Ph, phenyl-(C1-2)alkyl, (where Ph is optionally mono-substituted by F or Cl), -C(0)R (R = C1-2 alkyl, Ph, optionally mono-substituted by F or C1), -C(0)OR' (R' = C1-2 alkyl)]. This treatment ameliorates, diminishes, actively treats, reverses or prevents any injury, damage or loss of articular cartilage or subchondral bone subsequent to said early stage of the degeneration. Whether or not a mammal needs such treatment is detd. by whether or not it exhibits a statistically significant deviation from normal std. values in synovial fluid or membrane from the affected joint, with respect to at least five of the following substances: increased interleukin-1.beta.; increased tumor necrosis factor .alpha.; increased ratio of IL-1.beta. to IL-1 receptor antagonist protein; increased expression of p55 TNF receptors; increased interleukin-6; increased leukemia inhibitory factor; decreased insulin-like growth factor-1; decreased transforming growth factor .beta.; decreased platelet-derived growth factor; decreased basic fibroblast growth factor; increased keratan sulfate; increased stromelysin; increased ratio of stromelysin to tissue inhibitor of metalloproteases; increased osteocalcin; increased alk. phosphatase; increased cAMP responsive to hormone challenge; increased urokinase plasminogen activator; increased cartilage oligomeric matrix protein; and increased collagenase. 3416-24-8, Glucosamine 9007-28-7, Chondroitin sulfate IT RL: BAC (Biological activity or effector, except adverse); THU

T 3416-24-8, Glucosamine 9007-28-7, Chondroitin sulfate
RL: BAC (Biological activity or effector, except adverse); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(carprofen and derivs. for treatment or prevention of early stages of degeneration of articular cartilage or subchondral bone, and use with other agents)

L92 ANSWER 2 OF 51 HCAPLUS COPYRIGHT 2001 ACS AN 2001:338363 HCAPLUS

```
DN
     134:357562
     Compositions of orally administered nutritional supplements to repair
TΙ
     articular cartilage
     Madere, Shawn Paul
IN
PA
     USA
SO
     PCT Int. Appl., 29 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                      KIND
     PATENT NO.
                            DATE
                                            APPLICATION NO.
                                                             DATE
                                                             20001102
PΙ
     WO 2001032188
                       Α1
                             20010510
                                            WO 2000-US30268
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,
                                                                      ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-162948
                       Ρ
                             19991102
     Provided is a synergistic combination of nutritional supplements
     classified as Nutraceuticals and further combined with antioxidant
     vitamins and minerals that, when orally administered to mammals, provides
     optimal delivery of vital metabolic precursors necessary for the prodn.
     and repair of articular cartilage. Specifically provided is, a unique
     combination of chondroitin sulfate sodium, methylsulfonylmethane,
     glucosamine potassium, glucosamine hydrochloride, glucosamine sulfate
     sodium, N-acetyl D-Glucosamine, sodium ascorbate and chelated manganese
     proteinate compounded through agitation.
                                                The provided compns. and methods
     of administration are designed to effectively elevate and sustain blood
     levels of said compds. in turn enhancing the body's natural
     chondroprotective mechanisms while providing an efficient delivery
     mechanism which optimizes cellular uptake of glucosamine and chondroitin.
     This process of forming specified synergistic relationships between vital
     metabolic precursors increases the body's prodn. of proteoglycans,
     chondrocytes, hyaluron, glycosaminoglycans and collagen, facilitating the
     repair and regeneration of articular cartilage and symptomatic relief from
     pain and inflammation assocd. with articular degeneration.
     Efficacy of the compn. in the treatment of cats, dogs and horses is shown.
ΙT
     66-84-2, Glucosamine hydrochloride 7512-17-6, N-Acetyl
     D-Glucosamine
     RL: BAC (Biological activity or effector, except adverse); FFD (Food or
     feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (compns. of orally administered nutritional supplements to repair
        articular cartilage)
RE.CNT
(1) Florio; US 6136795 A 2000 HCAPLUS
    Henderson; US 5364845 A 1994 HCAPLUS
(2)
(3) Rose; US 5916565 A 1999 HCAPLUS
     ANSWER 3 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
AN
     2001:208112
                  HCAPLUS
DN
     134:242620
ΤI
     Glucosamine and egg for reducing inflammation
     Adalsteinsson, Orn; Hunchar, Jeffrey G.; Iyer, Subramanian
IN
PA
SO
     PCT Int. Appl., 43 pp.
     CODEN: PIXXD2
·DT
     Patent
LA
     English
FAN.CNT 1
```

APPLICATION NO.

DATE

KIND DATE

PATENT NO.

```
WO 2001019374
                                           WO 2000-US24484 20000907
                       Ä2
                            20010322
PI
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-153887
                      Ρ
                            19990914
     US 2000-192385
                       Р
                            20000327
     The invention is directed to a compn. and method for the treatment and
AΒ
     prevention of inflammation and inflammatory related
     disorders. The compn. is glucosamine in combination with an egg product.
     It is generally preferred that the egg product is obtained from an avian
     which has been hyperimmunized with an immunogenic mixt. and/or which
     contains an anti-inflammatory compn. In the rat adjuvant
     arthritis model, which is a chronic animal model for
     inflammation, the PL-100 egg obtained from chickens immunized by
     PL-100 vaccine contg. immunogenic mixt. of killed bacteria, and
     glucosamine-HCl showed an additive effect. PL-100 egg + glucosamine-HCl
     not only restricts the severity of inflammation at the beginning
     of the disease, but also inhibits it toward the end of the study.
TΤ
     66-84-2, Glucosamine hydrochloride 3416-24-8,
     Glucosamine 29031-19-4, Glucosamine sulfate
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (glucosamine and egg product obtained from hyperimmunized chickens for
        reducing inflammation)
L92
    ANSWER 4 OF 51 HCAPLUS COPYRIGHT 2001 ACS
AN
     2001:195197 HCAPLUS
DN
     134:227437
TI
     Biocompatible surfaces comprising polysaccharide derivatives and a method
     for their preparation
     Nelson, Deanna J.; Hai, Ton That; Pereira, David E.; Estep, Timothy N.
IN
PA
     Baxter International, Inc., USA
SO
     U.S., 19 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
PΙ
     US 6204254
                      В1
                            20010320
                                           US 1997-928841
                                                            19970912
AB
     A novel group of compds. is disclosed for decorating the surface of
     synthetic polymeric or tissue derived prostheses to prevent adverse
    rejection events. The decorating mols. are obtained as derivs. of
     naturally occurring polysaccharides, derivatized to provide functionally
     reactive groups at the termini thereof, and the reacting with nucleophilic
     or other groups on the surface of the prosthesis in a simple one step
     reaction. Some of these reagents are useful in noncovalent adsorption to
     polyolefinic or perfluorocarbon based materials. Finally, phospholipids
     partially substituted with the nonantigenic polysaccharides provide a
     superior bipolar component for liposome formation. Chondroitin
     sulfate-modified-distearoyl phosphatidylethanolamine (I) was prepd. by
     reaction of chondroitin sulfate-CO-N-oxysuccinimide with lyso-distearoyl
     phosphatidylethanolamine. Liposomes were prepd. by micro-fluidization
     (emulsification) of a compn. of I/hydrogenated soy
     phosphatidylcholine/cholesterol in molar proportions of 5:55:40, resp.
     is anticipated that the blood circulation half-lives of the biocompatible
     liposomes will be significantly longer than those of liposomes formulated
     without the I.
     7512-17-6D, N-Acetylglucosamine, derivs: 9007-28-7,
ΙT
```

RE

ΑN

DN

TΙ

ΙN

PA

SO

DT

LA

PΙ

ΙT

L92

ΑN DN

ΤI

tissues

Chondroitin sulfate-RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (biocompatible surfaces comprising polysaccharide derivs. and method for their prepn.) RE.CNT (1) Anon; WO 9634889 1996 HCAPLUS (2) Burns; US 5527893 1996 HCAPLUS (3) Hascall; Glycoimmunology 1995, P205 HCAPLUS (4) Jacquinet; US 4943630 1990 HCAPLUS (5) Kokusho; US 4624919 1986 HCAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 5 OF 51 HCAPLUS COPYRIGHT 2001 ACS L92 2001:114783 HCAPLUS 134:168078 Skin care of food composition containing n-acetyl-glucosamine Matahira, Yoshiharu; Saito, Michiko Yaizu Suisankagaku Industry Co., Ltd., Japan Eur. Pat. Appl., 17 pp. CODEN: EPXXDW Patent English FAN.CNT 1 KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ --------A2 20010214 EP 2000-303523 20000427 EP 1075836 EP 1075836 20010425 А3 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO A2 JP 1999-225245 JP 2001048789 20010220 19990809 CN 2000-108263 CN 1283413 Α 20010214 20000428 PRAI JP 1999-225245 Α 19990809 The present invention provides a skin care agent comprising N-acetylglucosamine as an active ingredient. The skin care agent is preferably in the form of tablets, capsules, powder such as dust or granules, liq. or paste. The skin care agent of the present invention may be incorporated into foods such as confectioneries, powd. soup and beverages. By orally ingesting the skin care agent of the present invention, the N-acetylglucosamine as an active ingredient is rapidly absorbed, and by utilizing a part thereof as a starting material of acidic mucopolysaccharides such as hyaluronic acid or chondroitin sulfate, the moisture and tension of skin can be improved and the rough skin and fine wrinkles can be prevented or ameliorated. For example, a significant improvement in females with xeroderma and rough skin was obsd. by administration of N-acetylglucosamine tablets (200 mg/tablet, 5 tablets/day) for 8 wk, compared to females taking placebo of non-NAG-contg. tablets. 7512-17-6P, N-Acetylglucosamine RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BUU (Biological use, unclassified); FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (skin care of compns. contg. acetylglucosamine) 9007-28-7, Chondroitin sulfate RL: BPR (Biological process); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (skin care of compns. contg. acetylglucosamine) ANSWER 6 OF 51 HCAPLUS COPYRIGHT 2001 ACS 2001:31320 HCAPLUS 134:91149

Methods and compositions containing glucosamine, methylsulfonylmethane,

and Perna component for the support, regeneration and repair of connective

```
IN
     Kendall, Roger V.
PΑ
     Foodscience Corporation, USA
SO
     PCT Int. Appl., 17 pp.
     CODEN: PIXXD2
DT
     Patent
     English
T.A
FAN.CNT 1
                                                APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE
                                                                   DATE
     WO 2001001976
                               20010111
                                              WO 2000-US40298 20000706
PΤ
                        A2
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
              SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-142392
                         Ρ
                               19990706
     A method for treating a subject for inflammatory disease,
     autoimmune disease, or lupus erythematosus comprises administering
     methylsulfonylmethane, glucosamine, and at least one component from Perna
     canaliculus. For example, Perna Plus tablets/capsules were prepd. contg.
     freeze-dried P. canaliculus 500 mg, glucosamine sulfate 300 mg, and
     methylsulfonylmethane 200 mg. A women diagnosed with
     osteoarthritis in the left knee was administered Perna
     tablets/capsules (freeze-dried P. canaliculus 500 mg and alfalfa 100 mg)
     four times a day. After 3 wk improvements were obsd., but after phys.
     activity or on rainy days the knee become sensitive and painful. After 3
     mo on the Perna product, the patient switched to Perna Plus at a dosage of
     4 tablets/day. Perna Plus gave a noticeable improved response over that
     of the Perna after several days of treatment. Within 7 days of Perna Plus
     treatment, the sensitivity in the knee was reduced with less pain. After
     2 wk of treatment with Perna Plus, all pain and stiffness was eliminated, even after phys. activity such as jogging. The individual continued to be
     pain free while maintaining a dosage of 2-3 tablets/day of Perna Plus.
     66-84-2, Glucosamine hydrochloride 3416-24-8,
     Glucosamine 29031-19-4, Glucosamine sulfate
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
         (compns. contq. glucosamine, methylsulfonylmethane, and freeze-dried
         Perna canaliculus for support, regeneration and repair of connective
L92
     ANSWER 7 OF 51 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     2000:891561 HCAPLUS
DN
     134:46801
     Methods for treating arthritis using collagen Type II,
ΤI
     glucosamine chondroitin sulfate, and compositions
     Sorgente, Nino; Nakamura, Robert M.
IN
PA
     Immudyne, Inc., USA
SO
     U.S., 5 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 1
                                                APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE
                         Α
                                               US 1999-285538
                               20001219
                                                                   19990402
PΙ
     The invention describes compns. and methods for treatment of rheumatoid
AB
     arthritis and osteoarthritis. The compns. comprise
     insol., native collagen Type II in a particular form in combinations with
     other active agents, including glucosamine, chondroitin, ascorbate, boron
     and magnesium. Also described are methods for producing particulated
     insol. native collagen Type II.
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3416-24-8, Glucosamine 9007-28-7, Chondroitin sulfate
TΤ
     29031-19-4, Glucosamine sulfate
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oral pharmaceuticals contg. collagens and glucosamines and
        chondroitins for treatment of arthritis)
RE.CNT
RE
(1) Henderson; US 5364845 1994 HCAPLUS
(2) Koepff; US 4804745 1989 HCAPLUS
(3) Moore; US 5645851 1997 HCAPLUS
(4) Neff; US 5925736 1999 HCAPLUS
(5) Trentham; US 5399347 1995 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 8 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     2000:889642 HCAPLUS
AN
DN
     134:21423
     A synergistic composition comprising mussel protein extract and
ΤI
     glycosaminoglycan suitable for treatment of arthritis
ΙN
     Croft, John Eric
PA
     MacFarlane Laboratories New Zealand Limited, N. Z.
     Brit. UK Pat. Appl., 10 pp.
SO
     CODEN: BAXXDU
DT
     Patent
     English
LA
FAN.CNT 1
                      KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
     PATENT NO.
                             20000906
                                            GB 1999-4672
                                                              19990301
     GB 2347349
                       A1
PΙ
     A pharmaceutical compn. comprising proteins extd. from the New Zealand
AΒ
     green-lipped mussel (Perna canaliculus) and one or more
     glycosaminoglycans, preferable glucosamine or its sulfate, has anti-
     inflammatory properties. The compn. is used in the treatment of
     arthritis. The combination of the protein ext. and the
     glycosaminoglycan is synergistic with respect to the effect of the same
     concn. of the individual components. The preferred compn. includeds ma
     homogeneous mixt. of a freeze-dried powder contg. protein ext. and
     glycosaminoglycan powder. The compns. are capsules or tablets.
     3416-24-8, Glucosamine 7512-17-6, N-Acetylglucosamine
ΙT
     9007-28-7, Chondroitin sulfate 29031-19-4, Glucosamine
     sulfate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (synergistic antiarthritic compn. comprising mussel protein
        ext. and glycosaminoglycan)
L92
     ANSWER 9 OF 51 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     2000:880976 HCAPLUS
DN
     134:33013
     Combination of glucosamine with herbal extracts of Tripterygium, Ligustrum
TI
     and Erycibe
     Zhong, Shouming; Yu, Hongwen; Babish, John G.
IN
PA
     Oxford Natural Products Plc, UK
SO
     PCT Int. Appl., 20 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                             APPLICATION NO.
     PATENT NO.
                      KIND
                             DATE
                                                              DATE
                                            WO 2000-GB2092
                                                              20000601
     WO 2000074696
                             20001214
PΙ
                       A1
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
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ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 PRAI US 1999-137172
                             19990602
                       P
      US 1999-153977
                        Ρ
                             19990914
 AB
      A herbal compn. comprises glucosamine and at least one Chinese herb
      selected from Tripterygium wilfordii, Ligustrum lucidum and Erycibe
                 The herbal compn. is useful for alleviating the symptoms of an
      ailment that involves the inflammation or degeneration of joint
      tissues, such as arthritis, and can be formulated into a dietary
      supplement or a pharmaceutical or veterinary compn. For example, tablets
      were prepd. to deliver 21 mg/kg glucosamine, 1.5 mg/kg T. wilfordii ext.
      (0.1% wt. triptolide), 5.0 mg/kg L. lucidum ext. (45% wt. oleanolic acid),
      and 6.5 mg/kg E. schmidtii ext. (0.35% wt. scopoletin) using talc and Mg
      stearate as excipients. Administration of one tablet a day improved
      symptoms of arthritis in dogs after 7-10 days.
      66-84-2, Glucosamine hydrochloride 7512-17-6, N-Acetyl
 ΙT
      glucosamine 29031-19-4, Glucosamine sulfate
      RL: BAC (Biological activity or effector, except adverse); FFD (Food or
      feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (compns. contg. glucosamine and Chinese herbs, Tripterygium, Ligustrum
         and Erycibe, for treatment of inflammation)
 IT
      3416-24-8, Glucosamine
      RL: BAC (Biological activity or effector, except adverse); THU
      (Therapeutic use); BIOL (Biological study); USES (Uses)
         (compns. contg. glucosamine and Chinese herbs, Tripterygium, Ligustrum
         and Erycibe, for treatment of inflammation)
RE.CNT
        11
RE
 (1) Cai, J; WO 9813057 A 1998 HCAPLUS
(3) Paoli Ambrosi Gianfranco de; EP 0852946 A 1998 HCAPLUS
 (4) Pharmagenesis Inc; WO 0012483 A 2000 HCAPLUS
 (6) Res Dev Foundation; WO 9959578 A 1999 HCAPLUS
 (8) Univ Washington; WO 9851302 A 1998 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
L92
     ANSWER 10 OF 51 HCAPLUS COPYRIGHT 2001 ACS
AN
      2000:869575 HCAPLUS
DN
      134:32991
ΤI
      Capsule compositions and their production
IN
     Goto, Yoshio; Kaizu, Nobuhide
PA
      Goto Corporation Y. K., Japan
SO
      Jpn. Kokai Tokkyo Koho, 7 pp.
      CODEN: JKXXAF
 DT
      Patent
LA
      Japanese
 FAN. CNT 1
      PATENT NO.
                       KIND
                             DATE
                                            APPLICATION NO.
                                                             DATE
                       ____
                        A2
                             20001212
                                            JP 2000-86057
                                                             20000327
 PΙ
      JP 2000344661
 PRAI JP 1999-83655
                       Α
                             19990326
      The invention relates to a capsule compn. suitable for use as a
      food, a pharmaceutical, or a cosmetic, contg. minimized amt. of oil and
      emulsifier, wherein the compn. contains water 10-60, plant fiber, health
      supplement, biol. active ingredient, hardly oil-sol. powder, or hardly
      oil-sol. soft ext. material 1-90 %. A capsule compn. contg.
      plant oil 5, Gymnema ext. powder 35, Garcinia powder 35, cellulose
      10, and water 15 % was prepd.
      3416-24-8, Glucosamine 9004-34-6,
 IT
      Cellulose, biological studies
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (capsule compns. contg. minimized amts. of oils and
```

emulsifiers contg.)

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AN
     2000:755211 HCAPLUS
DN
     133:340208
ΤI
     Novel compositions useful for delivering anti-inflammatory
     agents into a cell
ΙN
     Unger, Evan C.; McCreery, Thomas; Sadewasser, David A.
     ImaRx Pharmaceutical Corp., USA
PA
     Eur. Pat. Appl., 78 pp.
SO
     CODEN: EPXXDW
DT
     Patent
I.A
     English
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
                           -----
                                     EP 2000-303249 20000418
     EP 1046394 A2 20001025
PT
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI US 1999-294623
                           19990419
                     Α
     The present invention is directed, inter alia, to compns. and their use
     for delivering compds. into a cell. In a preferred embodiment, the
     compns. comprise, in combination with the compd. to be delivered, an org.
     halide, a targeting ligand, and a nuclear localization sequence,
     optionally in the presence of a carrier. Ultrasound may be applied, if
     desired. The compns. are particularly suitable for the treatment of
     inflammatory diseases.
     9004-32-4, Carboxymethylcellulose 9004-34-6,
ΙT
     Cellulose, biological studies 9004-65-3, Hydroxypropyl
     methylcellulose
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (drug carrier; peptide compns. useful for delivering anti-
        inflammatory agents into a cell)
ΙT
     3416-24-8D, Glucosamine, polymers
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (drug carriers; peptide compns. useful for delivering anti-
        inflammatory agents into a cell)
L92
    ANSWER 12 OF 51 HCAPLUS COPYRIGHT 2001 ACS
AN
     2000:754498 HCAPLUS
DN
     133:301216
ΤI
     Dietary regimen of nutritional supplements for relief of symptoms of
     arthritis
IN
     Florio, Vito V.
PA
     Omni Nutraceuticals, Inc., USA
     U.S., 6 pp.
SO
     CODEN: USXXAM
DΤ
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                           _____
                      A
                           20001024
                                         US 1998-193474
PΙ
                                                            19981118
     The unique combination of nutritional supplements of this invention is
AB
     believed to function by both increasing the available (effective blood
     level) of anti-inflammatory agents and promotion of the
     healing/regenerative process in the effected joints, thus, producing
     unexpected and lasting symptomatic relief from the debilitating effects of
     both osteoarthritis and rheumatoid arthritis. The
     essential nutritional supplements of the dietary regimen of this invention
     are as follows: (a) gamma linolenic acid (unrefined), hereinafter "GLA"
     (b) a mixt. of eicosapentaenoic acid and docosahexaenoic acid, hereinafter
     collectively "EPA" (c) a mixt. of chondroitin sulfate, N-acetyl
     glucosamine sulfate, glucosamine sulfate and manganese aspartate,
     hereinafter collectively "CHONDROX". The regimen is adjusted based upon
     the wt. of the individual, and once symptomatic relief is achieved, the
     individual remains essentially free from the debilitating effects of
     arthritis so as long the daily regimen is faithfully followed.
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7512-17-6 9007-28-7, Chondroitin sulfate

IT

29031-19-4

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RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
         (dietary regimen of nutritional supplements for relief of symptoms of
        arthritis)
RE.CNT
        10
RE
(2) Anon; EP 0609001 1994 HCAPLUS
(3) Henderson; US 5364845 1994 HCAPLUS
(7) Rovati; US 3683076 1972 HCAPLUS
(8) Rubin; US 4843095 1989 HCAPLUS
(9) Soll; US 5166048 1992 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
L92 ANSWER 13 OF 51 HCAPLUS COPYRIGHT 2001 ACS
AN
     2000:608589 HCAPLUS
DN
     133:198688
ΤI
     Multiparticulate formulations containing polycationic complexes
     Hardee, Gregory E.; Tillman, Lloyd G.; Mehta, Rahul C.; Teng, Ching-Leou
IN
PA
     Isis Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 38 pp.
     CODEN: PIXXD2
DΤ
     Patent
     English
T:A
FAN.CNT 1
     PATENT NO.
                       KIND
                              DATE
                                              APPLICATION NO.
                                                                 DATE
     WO 2000050050
                              20000831
                                              WO 2000-US4662
                       A1
                                                                 20000223
PΙ
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
              CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-256515
                              19990223
                        Α
AΒ
     The present invention is related to non-parenteral multiparticulate
     formulations capable of transporting therapeutic, prophylactic and
     diagnostic agents across mucosal membranes such as gastrointestinal,
     buccal, nasal, rectal and vaginal. Formulations comprise a
     plurality of carrier particles, an agent to be delivered across a mucosal
     membrane, and a penetration enhancer. The drug is adhered to the surface
     of the carrier particle or is impregnated within by electrostatic,
     covalent or mech. forces. PLGA was dissolved in hexafluoroacetone2 and
     oligonucleotide ISIS-2302 was dissolved in water. The aq. and polymer
     solns. were combined to give a dispersed phase. A continuous phase was
     prepd. by dissolving sorbitan sesquioleate in cottonseed oil.
     dispersed phase was then slowly added to the continuous phase, while
     mixing and continued mixing for about 3 h and increasing the temp. to
     50.degree. to evap. the volatile solvent.
IT
     3416-24-8D, Glucosamine, protamine complexes
     9004-34-6D, Cellulose, derivs.
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (multiparticulate formulations contg. polycationic complexes)
RE.CNT
RE
(1) Gao; US 5795587 A 1998 HCAPLUS
(2) Hedley; US 5783567 A 1998 HCAPLUS
(3) Isis Pharmaceuticals Inc; WO 9849348 A1 1998 HCAPLUS
     ANSWER 14 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     2000:555951
                  HCAPLUS
ΑN
     133:125281
DN
     Drug formulations of the antiarthritic agent glucosamine
TΙ
```

```
hydrochloride
    Kompantsev, V. A.; Samokish, I. I.; Kazakov, A. L.; Vasina, T. M.;
     Vasilenko, Yu. K.; Drogovoz, S. M.; Zupanets, I. A.; Gokzhaeva, L. P.
TN
     Pyatigorskaya Gosudarstvennaya Farmatsevticheskaya Akademiya, Russia
PΑ
SO
     From: Izobreteniya 1999, (14), 468.
     CODEN: RUXXE7
     Patent
DT
     Russian
LA
FAN.CNT 1
                                                           DATE
                                          APPLICATION NO.
                      KIND DATE
     PATENT NO.
                                           -----
                            _____
                      ____
                                                            19960528
                                          RU 1996-110610
                            19990520
                      C1
     RU 2130310
PI
     Title only translated.
AΒ
     66-84-2, Glucosamine hydrochloride
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (drug formulations of the antiarthritic agent glucosamine
        hydrochloride)
L92 ANSWER 15 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     2000:509005 HCAPLUS
ΑN
     133:94582
DN
     Antiarthritic glucosamine hydrochloride composition for
ΤI
     injection
     Samokish, I. I.; Kompantsev, V. A.; Kazakov, A. L.; Berezhnaya, L. A.;
IN
     Vasilenko, Yu. K.; Drogovoz, S. M.; Zupanets, I. A.
     Pyatigorskaya Gosudarstvennaya Farmatsevticheskaya Akademiya, Russia
PΑ
     Russ.
SO
     From: Izobreteniya 1998, (24), 170.
     CODEN: RUXXE7
     Patent
DT
     Russian
LA
 FAN.CNT 1
                                           APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
                                           _____
                      ----
                            _____
                                                            19960506
                                          RU 1996-109524
                      C1 19980827
     RU 2118156
 PI.
     Title only translated.
 AΒ
      66-84-2, Glucosamine hydrochloride
 ΙT
     RL: BAC (Biological activity or effector, except adverse); PEP (Physical,
      engineering or chemical process); THU (Therapeutic use); BIOL (Biological
      study); PROC (Process); USES (Uses)
         (antiarthritic glucosamine hydrochloride compn. for
         injection)
     ANSWER-16-OF-51-HCAPLUS COPYRIGHT 2001 ACS
 L92
      2000:450021 HCAPLUS
 AN
      133:305551
 DN
      Oral polymeric N-acetyl-D-glucosamine as potential treatment for patients
 ΤI
      with osteoarthritis
      Rubin, B. R.; Talent, J. M.; Pertusi, R. M.; Forman, M. D.; Gracy, R. W.
      Departments of Internal Medicine, University of North Texas Health Science
 CS
      Center, Fort Worth, TX, 76107, USA
      Adv. Chitin Sci. (2000), 4 (EUCHIS'99), 266-269
 SO
      CODEN: ACSCFF
      Universitaet Potsdam, Universitaetsbibliothek
 PB
 DT
      Journal
      English
 LA
      We have evaluated the use of the orally ingested polymer of
      N-acetyl-D-glucosamine (POLY=Nag) for sustained release
      of glucosamine in the treatment of osteoarthritis. Subjects
      received either the polymer or a placebo and were evaluated for pain
      relief and impact on quality of life. In addn., serum samples were
      analyzed for glucosamine and N-acetylglucosamine by high performance liq
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chromatog. Results showed that oral ingestion of 1.5 g per day of POLY-Nag increased the serum concn. of glucosamine and improved the cli

assessment. Washout studies suggest that oral POLY-Nag sustains

a longer serum half-life than monomeric glucosamine. These data suggest that POLY-Nag may be useful in the treatment of **osteoarthritis**.

IT 7512-17-6, N-Acetyl-D-glucosamine

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(oral polymeric N-acetyl-D-glucosamine as potential treatment for patients with **osteoarthritis**)

IT **3416-24-8**, Glucosamine

RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (oral polymeric N-acetyl-D-glucosamine as potential treatment for patients with **osteoarthritis**)

RE.CNT 8

RE

- (1) Crolle, G; Cur Med Res Opin 1984, V7, P104
- (2) Felson, D; Epidemiol Rev 1998, V10, P1
- (3) McCarty, M; Medical Hypotheses 1998, V50, P507 HCAPLUS
- (4) Pelletier, J; ROTTA Res Group EULAR Glasgow 1999
- (7) Setnikar, I; Res 1993, V43, P1109 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L92 ANSWER 17 OF 51 HCAPLUS COPYRIGHT 2001 ACS
- AN 2000:65552 HCAPLUS
- DN 132:127462
- TI Particles, in particular micro- or nanoparticles, of crosslinked mono- and oligosaccharides, their production, and cosmetic, pharmaceutical, or food compositions containing them
- IN Perrier, Eric; Rey-Goutenoire, Sylvie; Buffevant, Chantal; Levy,
  Marie-Christine; Pariot, Nadine; Edwards, Florence; Andry, Marie-Christine
- PA Coletica, Fr.

SO Ger. Offen., 34 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

T TILY .	O141 T				
	PATENT NO.	KIND	DATE	APPLICATION NO. DATE	
					-
PΙ	DE 19932216	A1	20000127	DE 1999-19932216 1999070	9
	FR 2780901	A1	20000114	FR 1998-8809 1998070	9
	FR 2780901	B1	20000929		
	NL 1012517	. C2	20000111	NL 1999-1012517 1999070	5
	JP 2000038402	A2	20000208	JP 1999-196705 1999070	9
	US 6197757	В1	20010306	US 1999-350131 1999070	9
	ES 2155793	A1	20010516	ES 1999-1547 1999070	9
PRAI	FR 1998-8809	Α	19980709		

Particles consisting of .gtoreq.1 mono- or oligosaccharide, which are surface-crosslinked in emulsion by esterification of primary OH groups on the saccharides with a polyfunctional acylating agent, are useful as carriers or encapsulating agents for various hydrophilic or lipophilic active substances in prepn. of cosmetic, pharmaceutical, or food compns. The particles are biocompatible, biodegradable, and suitable for stabilization and protection of sensitive active substances or for their sustained release. The crosslinking reaction preferably occurs in a water-in-oil emulsion at room temp. and results in formation of a membrane of crosslinked saccharide surrounding an aq. phase. The saccharide may be a cyclodextrin; by forming an inclusion compd. with an active substance, it can be used to remove or harvest the latter from a liq. medium, or alternatively can slowly release an active substance from an inclusion compd. Thus, 6 mL of a 10% soln. of dihydroxyacetone (a ketose) in 1M carbonate buffer (pH 11) was emulsified in 30 mL cyclohexane contg. 5% Span 85, and with continued stirring, 40 mL of a 5% soln. of terephthaloyl chloride in CHCl3-cyclohexane (1:4 by vol.); after 30 min, the microcapsules were collected and washed. These microcapsules dissolved slowly in 1% Na2CO3 soln. or in PEG owing to alcoholysis of the ester bonds; the released dihydroxyacetone reacted with glycine to form a brown color. The microcapsules can

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therefore be used in cosmetic tanning prepns.
TΤ
      3416-24-8, D-Glucosamine 29031-19-4, D-Glucosamine
      sulfate
     RL: BUU (Biological use, unclassified); FFD (Food or feed use); THU
      (Therapeutic use); BIOL (Biological study); USES (Uses)
         (crosslinked; particles of crosslinked mono- and oligosaccharides,
         their prodn., and cosmetic, pharmaceutical, or food compns. contq.
         them)
1.92
     ANSWER 18 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1999:783883 HCAPLUS
ΑN
DN
     132:18810
     The use of anabolic agents, anti-catabolic agents, antioxidant agents, and
TI
     analgesics for protection, treatment and repair of connective tissues in
     humans and animals
     Henderson, Todd R.; Hammad, Tarek; Soliman, Medhat; Corson, Barbara;
IN
     Lipiello, Louis; Henderson, Robert
PΑ
     Nutramax Laboratories, Inc., USA
     PCT Int. Appl., 47 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
T.A
FAN.CNT 1
     PATENT NO.
                         KIND
                               DATE
                                                APPLICATION NO.
                                                                    DATE
PΙ
     WO 9962459
                         A2
                               19991209
                                                WO 1999-US12152
                                                                    19990603
     WO 9962459
                         A3
                               20000224
              AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
              DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1083929
                         A2
                               20010321
                                                EP 1999-927137
                                                                    19990603
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
PRAI US 1998-88205
                          Ρ
                                19980605
     US 1999-249335
                          Α
                                19990212
     US 1999-274881
                          A
                                19990323
     WO 1999-US12152
                         W
                                19990603
     Compns. and methods for the protection, treatment and repair of connective
     tissues in humans and animals comprise any or all of anabolic,
     anti-catabolic, anti-oxidant, and analgesic agents, including amino
     sugars, S-adenosylmethionine, arachidonic acid, glycosaminoglycans,
     including pentosan, collagen type II, tetracyclines or tetracycline-like
     compds., diacerin, superoxide dismutase, L-ergothionine, one or more
     avocado/soybean unsaponifiables, hydroxyproline, and an analgesic, e.g.,
     acetaminophen.
     3416-24-8, Glucosamine 9007-28-7, Chondroitin sulfate
     RL: BAC (Biological activity or effector, except adverse); THU
      (Therapeutic use); BIOL (Biological study); USES (Uses)
         (anabolic agents, anti-catabolic agents, antioxidant agents, and
         analgesics for protection, treatment and repair of connective tissues
         in humans and animals)
     ANSWER 19 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1999:690963 HCAPLUS
ΑN
DN
     131:307097
     Composition for and treatment of inflammatory bowel disease by
ΤI
     colon administration of N-acetylglucosamine
     Murch, Simon; French, Ian W.
IN
     Glucogenics Pharmaceuticals Inc., Can.
PΑ
     PCT Int. Appl., 40 pp.
SO
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CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
     WO 9953929
                            19991028
                                                             19990312
PΙ
                                           WO 1999-CA218
                       Α1
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6046179
                            20000404
                                           US 1999-261194
                                                             19990303
                       Α
     AU 9927092 ·
                       A1
                            19991108
                                           AU 1999-27092
                                                             19990312
                            20010131
     EP 1071432
                       Α1
                                           EP 1999-907220
                                                             19990312
            DE, ES, FR, GB, IT, NL
     NO 2000005223
                            20001120
                                           NO 2000-5223
                                                             20001017
                      Α
PRAI CA 1998-2234936
                       Α
                            19980417
     WO 1999-CA218
                       W
                            19990312
     The invention relates to a novel compn. and a novel method of treating
AB
     inflammatory bowel disease (IBD). More particularly, this
     invention pertains to a novel compn. contg. N-acetylglucosamine
     (NAG) as an active IBD treating agent and a pharmacol. suitable carrier,
     and a method of administering the compn. to the colon to treat IBD in a
     person afflicted with IBD. A compn. for treating inflammatory
     bowel disease in a patient suffering from inflammatory bowel
     disease comprising: (a) a therapeutic amt. of N-acetylglucosamine
     ; and (b) a pharmacol. acceptable carrier, adapted to be administered
     colonically to said patient.
IT
     7512-17-6, N-Acetylglucosamine
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (acetylglucosamine for treatment of inflammatory
        bowel disease, and pharmaceutical compns.)
ΙT
     9004-34-6, Cellulose, biological studies
     9004-34-6D, Cellulose, derivs.
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (acetylglucosamine for treatment of inflammatory
        bowel disease, and pharmaceutical compns.)
RE.CNT
ŔĒ
(1) Burton, A; US 5229374 A 1993 HCAPLUS
(2) Hendry Neil Geddes Clarkson; WO 8702244 A 1987 HCAPLUS
(3) Luigi, R; US 3697652 A 1972 HCAPLUS
(4)
   Rotta Research Lab; FR 2016182 A 1970 HCAPLUS
(5) Speck Ulrich; US 4870061 A 1989 HCAPLUS
L92
     ANSWER 20 OF 51 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     1999:231159 HCAPLUS
     130:271996
DN
     Chemical composition and method for more rapidly aiding the absorption,
ΤI
     binding and elimination of undigested fat in the human body
IN
     Diaz, Jose A.; Naranjo, Eduardo M.
PA
     USA
     U.S., 5 pp., Cont.-in-part of U.S. 5,795,576.
SO
     CODEN: USXXAM
DT
     Patent
     English
LA
FAN.CNT 3
                      KIND
                                           APPLICATION NO.
     PATENT NO.
                            19990406
                                            US 1998-135933
                                                             19980818
PΙ
                       Α
     US 5891441
     US 5795576
                      Α
                            19980818
                                           US 1997-888848
                                                             19970707
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AU 9891064
                            20000314
                                           AU 1998-91064
                       A1
                                                             19980818
PRAI US 1997-888848
                       A2
                            19970707
     WO 1998-US17074
                      Α
                            19980818
     A compn. and method for the rapid elimination of fat from the human body,
     prior to digestion, is provided. A quantity of the chem. compn. is
     intended to be ingested by humans, preferably with a glass of water prior
     to each meal, to aid in absorbing and binding fat, prior to its being
     digested, so that it may be rapidly eliminated from the human body,
     instead of stored as fat within the body. In a preferred embodiment the
     compn. comprises at least one fibrous agent, and ideally, psyllium, in an
     amt. of generally about 50 % of the compn., and an amt. of glucosamine,
     preferably glucosamine HCl, at generally about 40 % of the compn., and
     amts. of glucomannan, apple pectin, and stearic acid forming the other
     generally about 10% of the compn.
     66-84-2, Glucosamine hydrochloride
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (oral compns. contg. psyllium and glucosamine and glucomannan and
        pectin for fast elimination of undigested fats)
RE.CNT
RE
(2) Diaz; US 5795576 1998 HCAPLUS
(3) Dunn; US 4034121 1977 HCAPLUS
(4) Furda; US 4223023 1980 HCAPLUS
(7) Peniston; US 3533940 1970 HCAPLUS
(9) Rogozhin; US 4119619 1978 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
L92
    ANSWER 21 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1999:212698 HCAPLUS
ΑN
DN
     130:242324
ΤI
     Natural composition for treating bone or joint inflammation
IN
     Weisman, Bernard
PA
     USA
SO
     U.S., 6 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 1
                                           APPLICATION NO.
                            DATE
     PATENT NO.
                      KIND
                      Α
                                           US 1997-862513
ΡI
     US 5888514
                            19990330
                                                            19970523
     A compn. for treating a mammal having a condition characterized by bone or
AΒ
     joint inflammation comprises: 2,250 mg sol. bovine cartilage,
     250 mg sol. shark cartilage, 1,000 mg glucosamine sulfate, 350 mg
     mucopolysaccharide conc., 225 mg proteolytic enzymes from hog pancreatic
     ext., 500 mg standardized ext. of ashwagandha, 470 mg ext. of Boswellia
     serrata comprising 150 mg boswellic acid, 1,000 mg chondroitin
     polysulfate, 100 mg ext. of sea cucumber, 300 mg black currant seed oil,
     3,500 mg ascorbic acid (vitamin C), 150 mg pyridoxine HCl (vitamin B6),
     and 1,000 mg devil's claw powder.
     9007-28-7, Chondroitin polysulfate 29031-19-4,
IT
     Glucosamine sulfate
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (natural compn. for treating bone or joint inflammation)
    ANSWER 22 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1999:48647
                HCAPLUS
ΑN
DN
     130:129972
ΤI
     Pharmaceutical gels containing hydrophilic polymer
IN
     Schoenfeldt, Lars; Nielsen, Brian; Ayzma, Josef
     Coloplast A/S, Den.
PΑ
SO
     PCT Int. Appl., 30 pp.
     CODEN: PIXXD2
DT
     Patent
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LA

English

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FAN.CNT 1
                                            APPLICATION NO.
     PATENT NO.
                       KIND
                             DATE
                                                              DATE
                                            -----
     WO 9901166
                       Α1
                             19990114
                                            WO 1998-DK298
                                                              19980702
             AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
             SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
                                            AU 1998-79087
     AU 9879087
                       A1
                             19990125
                                                              19980702
     EP 994733
                       Α1
                             20000426
                                            EP 1998-929248
                                                              19980702
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                             19970702
PRAI DK 1997-789
                             19980702
     WO 1998-DK298
AΒ
     Pharmaceutical gels contain a non-fibrous porous material essentially
     consisting of one or more hydrophilic polymeric component(s) or one or
     more hydrophilic polymeric component(s) and one or more pharmaceutical
     medicaments, said method comprising forming an aq. soln., sol or gel
     comprising one or more hydrophilic polymers and/or pharmaceutical
     medicaments, freezing or foaming the soln., dehydrating the frozen or
     foamed soln. leaving a non-fibrous porous material in a solid, porous
     form, and optionally subjecting the resulting porous material to a dry
     heat treatment. A crosslinked xerogel having controlled morphol. was
     prepd. by mixing 40.0 g of a 2.00% sodium alginate soln. with 40.0 g of a
     2.00% crosslinked CM-cellulose soln., and stirred. To the above
     mixt. was added 14.0 g of a 2.00% calcium alginate soln. and 3.00 g of a
     13.2.00% calcium chloride dihydrate soln. and mixed to obtain a
     homogeneous sol gel. The sol gel was frozen into sheets with a thickness
     of 4 mm and freeze-dried.
IT
     9000-11-7D, crosslinked
     RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (pharmaceutical gels contg. hydrophilic polymeric)
ΙT
     3416-24-8D, Glucosamine, derivs. 9004-32-4D,
     crosslinked 9004-62-0, Hydroxyethyl cellulose
     9007-28-7, Chondroitin sulfate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pharmaceutical gels contg. hydrophilic polymeric)
RE.CNT
RE
(1) Coloplast AS; WO 9505204 A1 1995 HCAPLUS
(2) Kimberly-Clark Corporation; WO 9620015 A2 1996 HCAPLUS
L92
    ANSWER 23 OF 51 HCAPLUS COPYRIGHT 2001 ACS
AN
     1999:48636 HCAPLUS
DN
     130:129947
ΤI
     Method and product using sturgeon notochord for alleviating the symptoms
     of arthritis
     Aoyagi, Seiji; Demichele, Stephen J.; Johns, Paul W.; Mazer, Terrence B.
IN
PA
     Abbott Laboratories, USA
SO
     PCT Int. Appl., 35 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
                                            APPLICATION NO.
     PATENT NO.
                       KIND
                             DATE
                                                              DATE
     WO 9901147
                             19990114
                                            WO 1998-US12997
                                                              19980623
ΡI
                       A1
         W: CA, JP, MX, NO
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
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EP 988043
                             20000329
                                            EP 1998-931488
                       Α1
                                                             19980623
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                             19970702
PRAI US 1997-887432
     WO 1998-US12997
                             19980623
AB
     This invention provides a compn. comprising notochord and exts. thereof in
     therapeutic amts. The invention more specifically relates to a method of
     treating arthritis in mammals, more particularly rheumatoid
     arthritis in humans through the enteral administration of
     notochord, notochord exts. or mixts. thereof. In a preferred embodiment,
     collagen obtained from sturgeon is enterally administered to a human at
     from 1.0 .mu.g to 1.05 gms per day.
     3416-24-8, Glucosamine 9007-28-7, Chondroitin sulfate
IT
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); PEP (Physical, engineering or chemical process); THU
     (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PROC
     (Process); USES (Uses)
        (using sturgeon notochord for alleviating the symptoms of
        arthritis)
RE.CNT
        3
RE
(1) Deceased, B; US 5709887 A 1998
(2) Miller; Biochemical and Biophysical Research Communications 1974, V60(1),
    P424 HCAPLUS
(3) Nagler-Anderson; Proceedings of the National Academy of Sciences USA 1986,
    V83, P7443 HCAPLUS
    ANSWER 24 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1998:788736 HCAPLUS
ΑN
DN
     130:57168
     Methods and compositions for poly-.beta.-(1.fwdarw.4)-N-acetylglucosamine.
TТ
     drug delivery
     Vournakis, John N.; Finkielsztein, Sergio; Pariser, Ernest R.; Helton,
IN
     Marine Polymer Technologies, Inc., USA
PΑ
SO
     U.S., 96 pp., Cont.-in-part of U.S. Ser. No. 347,911.
     CODEN: USXXAM
DT
     Patent
     English
T.A
FAN.CNT 9
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                                            US 1995-470077
ΡI
     US 5846952
                       Α
                            19981208
                                                             19950606
     US 5622834
                       Α
                             19970422
                                            US 1993-160569
                                                             19931201
     US 5623064
                       Α
                             19970422
                                            US 1994-347911
                                                             19941201
     WO 9639122
                       Α1
                            19961212
                                            WO 1996-US5257
                                                             19960604
             AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IL,
             IS, JP, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX,
             NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, AM,
             AZ, BY
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
             MR, NE, SN, TD, TG
                                            AU 1996-59178
                                                             19960604
     AU 9659178
                       A1
                             19961224
PRAI US 1993-160569
                       A2
                             19931201
     US 1994-347911
                       A2
                             19941201
                             19950606
     US 1995-470077
                       Α1
     US 1995-470083
                       A1
                             19950606
     US 1995-470912
                       Α1
                             19950606
     US 1995-471290
                       A1
                             19950606
     US 1995-471545
                       Α1
                             19950606
     WO 1996-US5257
                       W
                             19960604
AB
     The present invention relates to a purified, easily produced
     poly-.beta.-1.fwdarw.4-N-acetylglucosamine (p-GlcNAc) polysaccharide
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species useful in drug compns. The p-GlcNAc of the invention is a polymer of high mol. wt. whose constituent monogaccharide sugars are attached in a

IT

RE

1.92

AN DN

TI

ΙN

PΑ

SO

DT

LA

PΙ

RF.

L92

130:29245

Glucosamine fatty acid compositions for arthritis

AN

DN

TΙ

.beta.1.fwdarw.4 conformation, and which is free of proteins, and substantially free of single amino acids, and other org. and inorg. contaminants. In addn., derivs. and reformulations of p-GlcNAc are described. The present invention further relates to methods for the purifn. of the p-GlcNAc of the invention from microalgae, preferably diatom, starting sources. Still further, the invention relates to methods for the derivatization and reformulation of the p-GlcNAc. Addnl., the present invention relates to the uses of pure p-GlcNAc, its derivs., and/or its reformulations. 14131-68-1P RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (repeating unit, methods and compns. for poly-.beta.-(1.fwdarw.4)-Nacetylglucosamine drug delivery) RE.CNT (2) Anon; GB 1038367 1966 HCAPLUS (4) Anon; JP 62-288602 1987 HCAPLUS (6) Anon; WO 93/12875 1993 HCAPLUS (11) Blackwell; Meth Enz 1988, V161, P435 HCAPLUS (12) Bouriotis; US 5219749 1993 HCAPLUS ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 25 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1998:785659 HCAPLUS 130:43331 Glucosamine and .omega.-3-fatty acid pharmaceuticals for the treatment of arthritis Burger, John A. USA U.S., 6 pp. CODEN: USXXAM Patent English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE Α 19981201 US 1997-955098 US 5843919 19971022 A compn. and method for the treatment of arthritis in mammals and a method for making the compn., is disclosed. The compn. comprises  $\boldsymbol{1}$ or more glucosamines and 1 or more .omega.-3-fatty acids and is made by combining an .omega.-3-fatty acid with a glucosamine. A capsule contg. glucosamine-HCl 250, N-acetylglucosamine 75, EPA 135, and DHA 90 mg/capsule, is administered to dogs suffering from symptoms of arthritis at a dosage of about 1 capsule/20 kg body wt. BID for periods of time ranging from 3 days to 14 days. An improvement in clin. signs due to arthritis is obsd. to improve following 1 or 2 dosages, which continues throughout the period of treatment. 66-84-2, Glucosamine hydrochloride 3416-24-8, Glucosamine 7512-17-6, N-Acetylglucosamine 29031-19-4, Glucosamine sulfate RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (glucosamine and .omega.-3-fatty acid pharmaceuticals for treatment of arthritis) RE.CNT (1) Kremer; 1995 HCAPLUS (2) Rovati; US 3683076 1972 HCAPLUS ANSWER 26 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1998:776669 HCAPLUS

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ΙN
     Horrobin, David Frederick; Manku, Mehar Singh; McMordie, Austin
     Scotia Holdings PLC, UK
PA
     PCT Int. Appl., 23 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                                           APPLICATION NO.
                            DATE
                                                           DATE
                                           _____
     WO 9852556
PT
                      A1
                            19981126
                                           WO 1998-GB1425
                                                            19980518
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
                                                                         TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9874423
                            19981211
                                           AU 1998-74423
                                                            19980518
                       A1
                            20000209
                                           EP 1998-921639
                                                            19980518
     EP 977561
                       Α1
         R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, IE
     ZA 9804211
                            19981120
                                           ZA 1998-4211
                                                            19980519
                       Α
PRAI GB 1997-10351
                            19970520
     WO 1998-GB1425
                            19980518
     Compns. of glucosamine and an essential fatty acid, esp. 1 or more of the
AB
     ".DELTA.-6-desatd." n-6 and n-3 essential fatty acids other than compns.
     comprising chondroitin sulfate and their use in treatment of
     inflammatory joint conditions including osteoarthritis
     and arthritis are described. Thus, soft gelatin capsules
     contained evening primrose oil 295, marine fish oil 73, D-glucosamine
     sulfate.2NaCl 250 , and tocopheryl acetate 15 mg.
ΙT
     3416-24-8, D-Glucosamine
     RL: RCT (Reactant)
        (glucosamine fatty acid compns. for arthritis)
RE.CNT
        10
RE
(2) Choi, B; Han'guk Susan Hakhoechi 1996, V29(3), P345 HCAPLUS
(3) Florio, V; WO 9721434 A 1997 HCAPLUS
(4) Horrobin, D; WO 9633155 A 1996 HCAPLUS
(5) Ippolito, R; WO 9324505 A 1993 HCAPLUS
(6) Ledger, P; WO 9601645 A 1996 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 27 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1998:771319 HCAPLUS
ΑN
DN
     130:29226
ΤI
     Use of sugar derivatives against adhesion of protozoa and parasites
IN
     Wolf, Florian; Schreiber, Joerg; Maurer, Peter; Buenger, Joachim
PA
     Beiersdorf A.-G., Germany
SO
     Ger. Offen., 20 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
FAN.CNT 1
                      KIND
                            DATE
                                           APPLICATION NO.
     PATENT NO.
                            _____
PΙ
     DE 19721411
                      A1
                            19981126
                                           DE 1997-19721411 19970522
AB
     Adhesion of pathogenic protozoa and parasites to the skin or organ
     surfaces is inhibited by topical, oral, or parenteral
     administration of compns. contg. antiadhesive carbohydrates or
     carbohydrate derivs. such as esters with fatty acids. Thus, a
     water-in-oil lotion contained paraffin oil 25.00, silicone oil 2.00,
     ceresin 1.50, lanolin alc. 0.50, glucose sesquiisostearate 2.50, cetearyl
     glucoside 1.00, perfume, preservative, and H2O to 100.00 wt. %.
IT
     7512-17-6, N-Acetylglucosamine 9004-34-6,
     Cellulose, biological studies 9004-62-0,
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L92

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DN

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PΙ

AB

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IT

ΙT

9004-32-4, Sodium CM-cellulose 9007-28-7,

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceuticals for polyvalently presenting a therapeutic agent)

Chondroitin sulfate

## Hydroxyethylcellulose RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (use of sugar derivs. against adhesion of protozoa and parasites) ANSWER 28 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1998:706126 HCAPLUS 129:321220 Molecules presenting a multitude of active moieties Whitesides, George; Tananbaum, James B.; Griffin, John; Mammen, Mathai Advanced Medicine, Inc., USA; President and Fellows of Harvard College PCT Int. Appl., 173 pp. CODEN: PIXXD2 Patent English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE A2 19981022 WO 1998-US7171 19980409 WO 9846270 WO 9846270 A3 19990107 AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TM, TR, TMTJ, RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9871069 19981111 AU 1998-71069 19980409 Α1 20000126 EP 1998-918079 19980409 EP 973551 A2 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI BR 9808521 20000523 BR 1998-8521 19980409 Α Ρ 19970411 PRAI US 1997-43781 US 1997-43826 Ρ 19970414 WO 1998-US7171 W 19980409 Pharmaceutical compns. for polyvalently presenting an agent for therapy In one embodiment, the polyvalent presenter has a formula are described. as follows: (Y)-(X-A)n, wherein Y is a framework, X is a direct bond or a linker, A is a presented functional group, and n is greater than ten and is an integer selected such that the presented groups can interact with a plurality of target binding sites. The compn. also can include a pharmaceutically acceptable carrier. Alternatively, the presenter itself can serve as its own pharmaceutically acceptable carrier. Methods for treating diseases or conditions also are described. The methods involve administering to a subject a plurality of groups A such that the treatment occurs. The treatment occurs by the interaction of a polyvalent presenter with a plurality of target binding sites B. The polyvalent presenters disclosed herein provide for specificity in binding, which has a no. of advantages. Furthermore, the polyvalent presenters permit pos. and neg. interactions. Polyvalent presenters for facilitating the treatment of influenza involve generation and evaluating libraries of derivs. of poly(acrylic acid), e.g., N-acetylneuraminic acid as a side chain. 7512-17-6DP, N-Acetylglucosamine, reaction products with poly(acrylic acid) RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (pharmaceuticals for polyvalently presenting a therapeutic agent) 3416-24-8DP, 2-Amino-2-deoxy-D-glucose, reaction products with poly(acrylic acid) RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (pharmaceuticals for polyvalently presenting a therapeutic agent)

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L92 ANSWER 29 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1998:706082 HCAPLUS
ΑN
DN
     129:335760
ΤI
     Molecular complex and controlled-release of
     .alpha.-hydroxy acids
     Yu, Ruey J.: Van Scott, Eugene J.
IN
PA
     USA-
SO
     PCT Int. Appl., 83 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                             DATE
                                             APPLICATION NO.
                       KIND
                                                                DATE
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PΙ
     WO 9846217
                       A1
                             19981022
                                             WO 1998-US7073
                                                                19980410
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
             NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             -CM, GA, GN, ML, MR, NE, SN, TD, TG
                                             US 1997-842603
     US
        5877212_
                        Α
                             19990302
                                                                19970416
     AU 9868939
                        A1
                             19981111
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                                                                19980410
     EP 1009398
                        A1
                             20000621
                                             EP 1998-914628
                                                                19980410
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
                      . A2
                             19970416
PRAI US 1997-842603
     WO 1998-US7073
                      W
                             19980410
AB
     Compns. comprising an .alpha.-hydroxy acid or related acid and org.
     complexing agent having a mol. wt. ranging preferably between about 100
     and about 600 can form a controlled-release mol.
     complex. Such complexing agents preferably have 1 or more amino groups in
     addn. to other groups with unshared electrons such as OH, carbonyl, amido,
     ester and alkoxyl groups in the same mol. Such functional groups are
     capable of forming multiple intermol. hydrogen bonds with the OH groups of
     a free .alpha.-hydroxy acid or related acid. The complexing agents
     include amino acid esters, non-amphoteric amino acid amides,
     aminosaccharides, aminoalditols and aminocyclitols. A cream contained
     7.6% glycolic acid and 5.2% glycine Et ester in a molar ratio of 2:1.
     compn. reduced skin disorders like wrinkles, acne, etc.
ΙT
     3416-24-8DP, Glucosamine, analogs
     RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (mol. complex and controlled-release of
        .alpha.-hydroxy acids)
IT
     66-84-2, D-(+)-Glucosamine hydrochloride
     RL: RCT (Reactant)
        (mol. complex and controlled-release of
        .alpha.-hydroxy acids)
    ANSWER 30 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
AN
     1998:682292 HCAPLUS
DN
     129:321183
     Pharmaceuticals comprising a hydrolyzed collagen protein and glucosamine
ΤI
     for the treatment of arthroses
IN
     Myers, Andrew E.
     Richardson Labs, Inc., USA
PA
     PCT Int. Appl., 16 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
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FAN.CNT 1

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DATE
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                                                                  DATE
     WO 9844929
                               19981015
                                               WO 1998-US6869
                                                                  19980409
PI
                         Α1
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
              LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
              PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ; TM, TR, TT, UA, UG, US,
              UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
              CM, GA, GN, ML, MR, NE, SN, TD, TG
                                               AU 1998-69545
     AU 9869545
                                                                  19980409
                               19981030
                         A1
                                                                  19980409
     EP 991413
                               20000412
                                               EP 1998-915336
                         A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
PRAI US 1997-43226
                               19970410
     WO 1998-US6869
                               19980409
     A therapeutic compn. that is capable of functioning as an analgesic while
AΒ
     also furnishing a pharmacol. support for connective tissue repair and
     regeneration is disclosed. The present compn. contains, as essential
     ingredients, hydrolyzed collagen protein and glucosamine (and/or a
     therapeutically acceptable salt). The daily dosage is 7-8 g collagen
     hydrolyzate in combination with 1.5-2.0 g glucosamine in a wt. ratio of
     3.5-5.3.
ΙT
     66-84-2, Glucosamine hydrochloride 3416-24-8,
     Glucosamine 29031-19-4, Glucosamine sulfate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (pharmaceuticals contg. hydrolyzed collagen and glucosamine for
        treatment of arthroses)
     ANSWER 31 OF 51 HCAPLUS COPYRIGHT 2001 ACS
1.92
ΑN
     1998:564125 HCAPLUS
     129:166242
DN
     Pharmaceutical composition for aiding the absorption, binding and
ΤI
     elimination of undigested fat
     Diaz, Jose A.; Naranjo, Eduardo M.
TN
PA
     USA
SO
     U.S., 5 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 3
     PATENT NO.
                        KIND
                              DATE
                                               APPLICATION NO.
                                                                  DATE
                              19980818
                                               US 1997-888848
PΙ
     US 5795576
                         Α
                                                                  19970707
                                               US 1998-135933
     US 5891441
                         Α
                               19990406
                                                                  19980818
     WO 2000010586
                        A1
                               20000302
                                               WO 1998-US17074
                                                                  19980818
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
              NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
                                                                   TM,
                                                                       TR,
                                                                           TT, UA,
         UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
              FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9891064
                               20000314
                                               AU 1998-91064
                                                                  19980818
                         Α1
     US 6200574
                         B1
                               20010313
                                               US 2000-521224
                                                                  20000308
PRAI US 1996-21299
                         P
                               19960708
     US 1997-888848
                         A2
                               19970707
     US 1998-135920
                         A2
                               19980818
     WO 1998-US17074
                         Α
                               19980818
     A moisture activated compn. is provided for ingestion by humans to aid in
     absorbing and binding undigested fat for rapid elimination from the human
     body. This compn., in a preferred embodiment comprises a fibrous agent,
     such as psyllium, in an amt. of generally about 80% by wt. of the compn.,
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an amt. of glucosamine HCl generally about 10% by wt. of the compn., and

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amts. of glucomannan, apple pectin, and stearic acid forming the other generally about 10% by wt. of the compn. The compn. is formed into a capsule of 500 mg (no data). 66-84-2, Glucosamine hydrochloride RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compn. for aiding absorption, binding and elimination of undigested fat) ANSWER 32 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1998:542962 HCAPLUS 129:166230 Compositions and methods for prevention and treatment of vascular degenerative diseases Kosbab, John V. USA PCT Int. Appl., 62 pp. CODEN: PIXXD2 Patent English FAN.CNT 1 KIND DATE APPLICATION NO. DATE PATENT NO. -----\_\_\_\_ WO 9833494 19980806 WO 1998-US2005 19980204 A1 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9861414 A1 19980825 AU 1998-61414 19980204 EP 1021177 20000726 EP 1998-906094 19980204 Α1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI PRAI US 1997-37084 Ρ 19970204 US 1997-43262 Ρ 19970417 WO 1998-US2005 W 19980204 This invention relates to nutrient and therapeutic compns. for treatment and prevention of symptoms and disease conditions assocd. with microangiopathy and macroangiopathy and to methods using the compns. In particular, the invention relates to compns. useful in the treatment of diabetic retinopathy and nephropathy, to compns. useful in the treatment of other retinal disorders including macular degeneration and cataracts, to compns. useful in wound healing, to compns. useful for treatment and prevention of neuropathy, to compns. useful for treatment and prevention of cardiovascular disease and to compns. useful for the treatment and prevention of dental and periodontal disorders. exemplary diabetic compn. contains bilberry ext., Ca (Krebs), chondroitin sulfate, Cr picolinate, Co Q10, Fenugreek seed powder, Flax seed powder, folic acid, linoleic acid, Ginkgo biloba, Gymnema sylvestre, taurine (or homotaurine), grape seed ext., acetyl L-carnitine, lutein, Mg (Krebs), N-acetyl-L-cysteine, pine bark ext., phytosterol complex, K citrate, protamine sulfate, shark cartilage, soy isolate, green tea polyphenols, vitamin A, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin E, and Zn (Krebs). 9007-28-7, Chondroitin sulfate 29031-19-4 RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (bioflavonoids and neovascular regulators for treatment of vascular degenerative diseases) ANSWER 33 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1998:473951 HCAPLUS

DN 129:126908 Composition for cosmetic, pharmaceutical or dietetic use based on an ΤI

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amino-sugar and/or a polyhydroxylic acid
     De Paoli Ambrosi, Gianfranco
ΙN
     Italy
PΑ
SO
     Eur. Pat. Appl., 14 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                             DATE
PΙ
     EP 852946
                       A2
                            19980715
                                           EP 1997-830609
                                                             19971117
     EP 852946
                       A3
                            19980916
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 6147054
                       Α
                            20001114
                                           US 1997-971436
                                                             19971117
                                           CA 1997-2219849
     CA 2219849
                       AΑ
                            19980529
                                                            19971121
PRAI IT 1996-BS94
                       Α
                            19961129
     A compn. is disclosed for cosmetic, pharmaceutical or dietetic use and
     including as the active ingredient, at least one of the substances which
     include acetylglucosamine and glucuronic acid in combination with the
     active ingredients which belong to the chem. class of the carboxylic
     acids, .alpha.-hydroxy acids, vitamins, amino acids, and bioflavonoids,
     and formulated with particular synergists, additives, and excipients for
     external use or for internal use.
ΙT
     7512-17-6, Acetylglucosamine
     RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
     chemical process); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (compn. for cosmetic, pharmaceutical or dietetic use based on an
        amino-sugar and/or a polyhydroxylic acid)
L92
    ANSWER 34 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1998:402327 HCAPLUS
ΑN
DN
     129:86018
ΤI
     Treatment of osteoarthritis by administering
    poly-N-acetyl-D-glucosamine
IN
     Sherman, William T.; Gracy, Robert W.
PA
     Lescarden, Inc., USA
     PCT Int. Appl., 20 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
     PATENT NO.
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                            _____
                                           _____
ΡI
     WO 9825631
                            19980618
                                           WO 1997-US23119
                                                            19971212
                       A1
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         RW: AT, BE,
                     CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                       Α1
                            19991124
                                           EP 1997-952456 19971212
            AT, BE,
                     CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     US 6117851
                       A
                            20000912
                                           US 1997-990161
                                                             19971212
PRAI US 1996-32855
                       ₽
                            19961213
    WO 1997-US23119
                       W
                            19971212
AB
     The methods of the present invention relate to administering to a mammal
     afflicted with osteoarthritis an effective amt. of
     poly-N-acetyl-D-glucosamine (poly-NAG), partially depolymd. poly-NAG,
    pharmaceutically acceptable salts of poly-NAG, or mixts. thereof, to treat
     osteoarthritis and/or alleviate the symptoms of
     osteoarthritis such as pain, joint tenderness and swelling and
     impaired joint mobility. The present invention also comprises solid and
     liq. pharmaceutical dosage forms comprising poly-NAG or its salts and
     mixts. These dosage forms may be administered orally and by-injection to
     treat osteoarthritis and/or alleviate the symptoms. An example
     is given showing that poly-NAG increases serum NAG levels and hydrolyzes
     to glucosamine in vivo.
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IT
     27555-50-6, Poly-N-acetyl-D-glucosamine
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (poly-N-acetyl-D-glucosamine formulations for treatment of
        osteoarthritis)
    ANSWER 35 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
ΑN
     1998:124026 HCAPLUS
DN
     128:196682
ΤI
     Compositions of plant carbohydrates as dietary supplements
IN
     McAnalley, Bill H.; McDaniel, H. Reginald; Moore, D. Eric; Vennum, Eileen
     P.; Fioretti, William C.
     Mannatech, Inc., USA; McAnalley, Bill H.; McDaniel, H. Reginald; Moore, D.
PA
     Eric; Vennum, Eileen P.; Fioretti, William C.
     PCT Int. Appl., 33 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English ·
LA
FAN.CNT 1
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     WO 9806418
                            19980219
                                           WO 1997-US13379
                                                            19970804
PΙ
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             LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,
             UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,
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             GN, ML, MR, NE, SN, TD, TG
     AU 9738199
                            19980306
                                           AU 1997-38199
                                                             19970804
                       Α1
     EP 923382
                       Α1
                            19990623
                                           EP 1997-935205
                                                             19970804
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     CN 1227495
                            19990901
                                           CN 1997-197147
                                                            19970804
                       Α
     BR 9711054
                       Α
                            20000111
                                           BR 1997-11054
                                                             19970804
     NO 9900572
                       Α
                            19990408
                                           NO 1999-572
                                                             19990208
PRAI US 1996-22467
                       Ρ
                            19960809
                       Ρ
     US 1996-30317
                            19961101
                       Ρ
     US 1997-57017
                            19970724
                       W
     WO 1997-US13379
                            19970804
AΒ
     Compns. of plant carbohydrates for dietary supplements and nutritional
     support for promotion and maintenance of good health. Defined
     nutritionally effective amts. of one to eleven essential saccharides,
     glyconutrients, are used in various inventive compns. as dietary
     supplements. The dietary compn. herein can include phytonutrients,
     vitamins, minerals, herbal exts., and other non-toxic nutrients.
     glyconutritional dietary supplement herein provides essential saccharides
     which are the building blocks of glycoproteins. These compns., when
     administered orally or topically, have been found to improve the
     well being of mammals suffering from a variety of disorders. A
     capsule compn. was prepd. contq. tragacanth gum, guar gum, Aerosil
     380, and rice flour.
     7512-17-6, N-Acetylglucosamine 9004-34-6,
     Cellulose, biological studies 9007-28-7, Chondroitin
     sulfate
     RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (compns. of plant carbohydrates as dietary supplements)
    ANSWER 36 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1997:689484 HCAPLUS
ΑN
DN
     127:336653
TI
     Glucosamine composition and method
IN
     Williams, Susan K.; Bynum, Stanley A.
```

Williams; Susan K., USA

PA

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SO
     U.S., 3 pp.
     CODEN: USXXAM
DT
     Patent
LA
     English
FAN.CNT 1
                     KIND DATE
     PATENT NO.
                                          APPLICATION NO. DATE
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                          _____
                                         -----
     US 5679344 A 19971021 US 1995-504714 19950720
PΙ
AB
     The invention relates to an antiulcer glucosamine-contg. compn. that
     includes an anti-inflammatory proteolytic enzyme to increase the
     rapidity of physiol. availability of the glucosamine and the method of
     increasing such availability by the use of proteolytic enzymes.
TΤ
     66-84-2, Glucosamine hydrochloride 3416-24-8,
     Glucosamine
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antiulcer glucosamine compns.)
    ANSWER 37 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
ΑN
     1997:684296 HCAPLUS
DN
     127:336632
ΤI
    Macromolecular complexes for drug delivery
IN
     Dadey, Eric J.
     Board of Trustees of the University of Illinois, USA; Dadey, Eric J.
PΑ
     PCT Int. Appl., 45 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    English
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO.
     PATENT NO.
                     ____
                           _____
                                         _____
                                    WO 1997-US6943 19970403
     WO 9737680
                    A1
                           19971016
PI
        W: CA, JP, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                     CA 1997-2251008 19970403
                AA 19971016
     CA 2251008
     US 6063370
                      Α.
                           20000516
                                          US 1998-155729
                                                         19981002
                    P
W
PRAI US 1996-14756
                           19960405
    WO 1997-US6943
                           19970403
    Novel macromol. drug complexes contg. a drug, like insulin, and
AB
     a polymer having a plurality of acid moieties, like carboxyl moieties or
    phosphonic acid moieties, are disclosed. Compns. contg. the macromol.
     complexes are administered to individuals suffering from a disease and the
     complexes release the drug, in vivo, to treat the disease, and to reduce,
     eliminate, or reverse complications assocd. with the disease. To
     illustrate the ability of a drug to form a macromol. drug complex with a
    polymer having a plurality of acid moieties, an aq. insulin
     soln. was admixed with an aq. soln. of polyvinylphosphonic acid and a mol.
    wt. of the complex was detd. by continuous flow multi-angle laser light
     scattering.
IT
     3416-24-8D, Glucosamine, polymer complexes 9007-28-7D,
     Chondroitin sulfate, drug complexes
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (drug-polymer complexes for various dosage forms)
L92
    ANSWER 38 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1997:650252 HCAPLUS
ΑN
DN
     127:298749
     Polysaccharide microspheres for the pulmonary delivery of drugs
ΤI
     Illum, Lisbeth; Watts, Peter James
ΙN
     Danbiosyst UK Limited, UK; Illum, Lisbeth; Watts, Peter James
PΑ
     PCT Int. Appl., 40 pp.
SO
     CODEN: PIXXD2
DT
     Patent
    English
LA
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FAN.CNT 1

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PATENT NO.
                       KIND
                              DATE
                                              APPLICATION NO.
                                                                DATE
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                              19971002
                                              WO 1997-GB808
PΙ
     WO 9735562
                        Α1
                                                                19970324
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
              DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,
              LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
              PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,
              VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB,
              GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
              ML, MR, NE, SN, TD, TG
     CA 2250053
                              19971002
                                              CA 1997-2250053
                                                                19970324
                        AΑ
     AU 9720384
                              19971017
                                              AU 1997-20384
                                                                19970324
                        Α1
     AU 718593
                        B2
                              20000420
                                              GB 1998-18593
     GB 2325162
                        A1
                              19981118
                                                                19970324
     GB 2325162
                        B2
                              20000223
                              19990210
                                                                19970324
                                              EP 1997-908411
     EP 895473
                        A1
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI
                              20000808
                                              JP 1997-534130
                                                                19970324
     JP 2000510100
                        T2
     NO 9804376
                        Α
                              19980921
                                              NO 1998-4376
                                                                19980921
PRAI GB 1996-6188
                        Α
                              19960323
                        W
                              19970324
     WO 1997-GB808
     The invention relates to improved compns. for the delivery of pharmacol.
AB
     agents to the respiratory tract of a mammal to provide improved peripheral
     deposition and systemic uptake wherein a therapeutic agent is incorporated
     into a polysaccharide microparticle through a process of spray drying.
     9004-32-4 35110-26-0, Polyglucosamine
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (polysaccharide microspheres for the pulmonary delivery of drugs)
L92
     ANSWER 39 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1997:557652 HCAPLUS
ΑN
DN
     127:225300
     Pharmaceutical compositions containing urogenital and intestinal disorders
ΤI
     comprising a substance derived from plant species of the ericaceae family
     and a lactic acid bacteria
IN
     Carella, Anne Marie; Sagel, Paul Joseph
PA
     Procter & Gamble Company, USA
SO
     PCT Int. Appl., 21 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
                       KIND
                              DATE
                                              APPLICATION NO.
                                                                DATE
ΡI
     WO 9729763
                        A1
                              19970821
                                             WO 1997-US1665
                                                                19970206
             AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, YU,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
              IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
              MR, NE, SN, TD, TG
     CA 2246371
                        AA
                              19970821
                                              CA 1997-2246371 19970206
     AU 9718542
                              19970902
                                              AU 1997-18542
                                                                19970206
                        Α1
     EP 881905
                        Α1
                              19981209
                                              EP 1997-904185
                                                                19970206
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
                              19990317
                                              CN 1997-192256
                                                                19970206
     CN 1211189
                        Α
     JP 11504049
                        T2
                              19990406
                                              JP 1997-529374
                                                                19970206
PRAI US 1996-601482
                              19960214
     US 1996-630096
                              19960409
     WO 1997-US1665
                              19970206
     Pharmaceutical compns. useful in preventing and/or treating urogenital and
AB
     intestinal disorders, comprising an effective amt. of at least one plant
```

species of the Ericaceae family or its ext. and an effective amt. of a growth factor for stimulating the growth of lactic acid bacteria, the growth factor selected from the group consisting of glycogen, rhamnose, gangliosides, salicin, oligosaccharides, galactose, lactulose, methyl-.alpha.-D-mannoside, p-nitrophenol-.alpha.-D-mannoside, maltose, dextrin, dextran, levan, sialic acid, acetylglucosamine, yeast exts., peptone, keratin, vegetable, soy, lauric acid, glycerophosphates and mixts. thereof. A tablet contained concd. cranberry ext. 17.600, fructoologosaccharide 56.340, Et cellulose 9.900, starch 11.230, talc 4.230, and stearic acid 0.700%.

IT 7512-17-6

RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. contg. urogenital and intestinal disorders comprising substance derived from ericaceae family and lactic acid bacteria)

- L92 ANSWER 40 OF 51 HCAPLUS COPYRIGHT 2001 ACS
- AN 1997:423406 HCAPLUS
- DN 127:122280
- TI Synthesis of functionalized nanoparticles via copolymerization in microemulsions and surface reactions
- AU Larpent, Chantal; Bernard, Elisabeth; Richard, Joel; Vaslin, Sophie
- CS S.I.R.C.O.B., EP CNRS 102, Universite Versailles-Saint Quentin Yvelines, Versailles, 78035, Fr.
- SO React. Funct. Polym. (1997), 33(1), 49-59 CODEN: RFPOF6; ISSN: 1381-5148
- PB Elsevier
- DT Journal
- LA English
- Oil-in-water microemulsions of mixts. of styrene and comonomer are easily prepd. using titrn. methods in the presence of nonionic alkyl-ethoxylated nonylphenol (NPn) or anionic (SDS) surfactants. Functionalized nanoparticles of 20-30-nm diam. bearing chloromethyl, active-ester, acid or pyridyl surface end-groups are prepd. by polymn. of microemulsions contg. mixts. of styrene (St) and vinylbenzyl chloride (VBC), N-acryloyloxysuccinimide (NHA), methacrylic acid (MA) or vinylpyridine (VP). Reactions of nucleophiles [ethanolamine, hexanediamine, taurine, norephedrine, aminoethylpyridine, glucosamine, 4-aminotempo, biotine hydrazide] on particles bearing either chloromethyl or active-ester surface end-groups, performed in aq. suspensions, give rise to a wide range of nanoparticles with various functionalities. The main role of the surfactant on such surface reactions is demonstrated and used to improve the reaction yields. Aq. suspensions of nanoparticles may be useful in drug delivery, microencapsulation, etc.
- IT 3416-24-8DP, Glucosamine, reaction products with chloromethylated styrene copolymers
  - RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of functionalized styrene copolymer nanoparticles by emulsion polymn. and surface reactions with nucleophiles)
- L92 ANSWER 41 OF 51 HCAPLUS COPYRIGHT 2001 ACS
- AN 1997:287194 HCAPLUS
- DN 126:347274
- TI Purifn. of poly-.beta.-1.fwdarw.4-N-acetylglucosamine from microalgae for medicinal and cosmetic applications
- IN Vournakis, John N.; Finkielsztein, Sergio; Pariser, Ernest R.; Helton, Mike
- PA Marine Polymer Technologies, Inc., USA
- SO U.S., 89 pp. Cont.-in-part of U.S. Ser. No. 160,569. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 9

PATENT NO. KIND DATE APPLI

APPLICATION NO. DATE

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US 5623064
                                            US 1994-347911
PΙ
                       Α
                             19970422
                                                              19941201
                                            US 1993-160569
     US 5622834
                       Α
                             19970422
                                                             19931201
     CA 2177823
                       AA
                             19950608
                                            CA 1994-2177823
                                                             19941201
     CN 1142833
                       Α
                             19970212
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                                                              19941201
     US 5624679
                       Α
                             19970429
                                            US 1995-470083
                                                              19950606
                       Α
                                            US 1995-471545
     US 5635493
                             19970603
                                                              19950606
                       Α
                                            US 1995-470912
    · US 5686115
                             19971111
                                                              19950606
                             19981208
                                            US 1995-470077
     US 5846952
                       Α
                                                             19950606
                       Α
                             19990112
                                            US 1995-471290
     US 5858350
                                                             19950606
     US 6063911
                       À
                             20000516
                                            US 1998-218288
                                                              19981222
PRAI US 1993-160569
                       A2
                             19931201
                       A2
     US 1994-347911
                             19941201
                       A2
     US 1995-471290
                             19950606
     The present invention relates to a purified, easily produced
AΒ
     poly-.beta.-1.fwdarw.4-N-acetylglucosamine (p-GlcNAc) polysaccharide
     species. The p-GlcNAc of the invention is a polymer of high mol. wt.
     whose constituent monosaccharide sugars are attached in a
     .beta.-1.fwdarw.4 conformation, and which is free of proteins, and
     substantially free of single amino acids, and other org. and inorg.
     contaminants. In addn., derivs. and reformulations of p-GlcNAc are
                The present invention further relates to methods for the
     described.
     purifn. of the p-GlcNAc of the invention from microalgae, preferably
     diatoms, as starting sources. Still further, the invention relates to
     methods for the derivatization and reformulation of the p-GlcNAc. Addnl.,
     the present invention relates to the uses of pure p-GlcNAc, its derivs.,
     and/or its reformulations.
TΤ
     27555-50-6P
     RL: BOC (Biological occurrence); BUU (Biological use, unclassified); PRP
     (Properties); PUR (Purification or recovery); RCT (Reactant); THU
     (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP
     (Preparation); USES (Uses)
        (purifn. of poly-.beta.-1.fwdarw.4-N-acetylglucosamine from microalgae
        for medicinal and cosmetic applications)
L92
     ANSWER 42 OF 51 HCAPLUS COPYRIGHT 2001 ACS
     1997:224073 HCAPLUS
ΑN
     126:216664
DN
     Pharmaceutical compositions containing analgesics and antihistamines and
TТ
     methods for treating respiratory disorders
     Cramer, Ronald Dean; Mitra, Sekhar; Riker, Donald Kay
IN
PA
     Procter and Gamble Company, USA
     PCT Int. Appl., 19 pp.
SO
     CODEN: PIXXD2
DΤ
     Patent
T.A
     English
FAN.CNT 1
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
     PATENT NO.
PΙ
     WO 9704808
                       A1
                             19970213
                                            WO 1996-US12249
                                                             19960725
             AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK,
             EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR,
             LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU,
             SD, SE
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA
                            .19970213
                                            CA 1996-2227958 19960725
     CA 2227958
                       AΑ
                                            AU 1996-65991
                                                             19960725
     AU 9665991
                       A1
                             19970226
     EP 841947
                       A1
                             19980520
                                            EP 1996-925495
                                                             19960725
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
         R:
                             19990907
                                            JP 1996-507747
                                                             19960725
     JP 11510168
                       Т2
PRAI US 1995-508775
                             19950728
                             19960305
     US 1996-611528
     WO 1996-US12249
                             19960725
os
     MARPAT 126:216664
     Compns. and methods for providing improved treatment, management or
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mitigation of cold cold-like, allergy, sinus, and/or flu symptoms by

TΤ

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AN DN

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PΑ

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IN PA SO

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PΙ

WO 9610395

A1

W: AU, CA, JP, KR, NZ, US

19960411

administering a safe and effective amt. of a compn. comprising an analgesic agent along with certain pyrrolidine and piperidine ether antihistaminic agents. A hard gelatin capsule contained ibuprofen 200.00, clemastine fumarate 0.67, pseudoephedrine. HCl 30.00 mg, and lactose q.s. Administration of 1-2 capsules every 4-12 h provide relief from cough, cold, flu and allergic rhinitis symptoms. **3416-24-8**, Glucosamine RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. contg. analgesics and antihistamines for treating respiratory disorders) ANSWER 43 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1996:574463 HCAPLUS 125:230797 Microbial adhesion-inhibiting carbohydrates Buenger, Joachim; Wolf, Florian; Schreiber, Joerg Beiersdorf A.-G., Germany Ger. Offen., 18 pp. CODEN: GWXXBX Patent German FAN.CNT 1 KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_ 19960808 DE 1995-19503423 19950203 DE 19503423 A1 WO 9623479 A2 19960808 WO 1996-EP441 19960202 А3 19970306 WO 9623479 W: JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE EP 806935 19971119 EP 1996-903968 19960202 A2 R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE JP 10513165 JP 1996-523268 19960202 T2 19981215 PRAI DE 1995-19503423 19950203 WO 1996-EP441 19960202 Carbohydrates and carbohydrate derivs. which inhibit the adhesion of microorganisms to surfaces are used in dermatol. and cosmetic compns. to diminish the no. of microorganisms adhering to the skin, mucous membranes, body cavities, wounds, or the eyes and the incidence of diseases caused by these microorganisms, e.g. dermatophytosis, thrush, and shingles. Thus, an oil-in-water lotion contained paraffin oil 5.00, iso-Pr palmitate 5.00, cetyl alc. 2.00, beeswax 2.00, ceteareth-20 2.00, ethoxylated glyceryl stearate 1.50, glycerin 3.00, xanthan 1.0, perfume, preservatives, and water to 100.00 parts. 7512-17-6, N-Acetylglucosamine 9004-34-6, Cellulose, biological studies 9004-62-0, Hydroxyethylcellulose RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (microbial adhesion-inhibiting carbohydrates) ANSWER 44 OF 51 HCAPLUS COPYRIGHT 2001 ACS 1996:363596 HCAPLUS 125:19085 Controlled-release pharmaceutical preparations Cox, John Cooper Csl Limited, Australia PCT Int. Appl., 21 pp. CODEN: PIXXD2 Patent English FAN.CNT 1 KIND DATE APPLICATION NO. DATE PATENT NO.

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WO 1995-AU648

19951004

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RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9535999
                     A1
                           19960426
                                          AU 1995-35999
                                                            19951004
PRAI AU 1994-8551
                            19941004
     WO 1995-AU648
                           __19951004
     Controlled-release pharmaceutical prepns. in stable
AB
     particulate form prepd. by spray-drying are disclosed.
                                                             The
     controlled-release prepn. may comprise one or more
    water-sol. pharmaceutically active compds. adsorbed to calcium or aluminum
     salt microparticles. Alternatively, the controlled-
     release prepn. may comprise microspherical particles comprising a
     continuous matrix of biodegradable polymer contg. one or more discrete
     regions comprising water-sol. pharmaceutically active compd.(s).
     3416-24-8, Glucosamine
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (controlled-release pharmaceutical prepns.)
    ANSWER 45 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1996:76574 HCAPLUS
ΑN
     124:97771
DN
    Film-coated microparticles for bioactive molecule delivery
ΤI
    Husband, Alan; Kingston, David
ΙN
    Vaccine Technologies Pty. Ltd., Australia
PΑ
SO
     PCT Int. Appl., 47 pp.
    CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
     PATENT NO.
                      KIND
                           DATE
                                           APPLICATION NO.
                                                            DATE
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                            19951123
                                           WO 1995-AU291
                                                           19950517
PΙ
    WO 9531184
                     A1
         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI,
            GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD,
            MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
             TM, TT
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
            LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN, TD, TG
    AU 9524404
                      A1
                            19951205
                                           AU 1995-24404
                                                            19950517
PRAI AU 1994-5722
                            19940518
                            19950517
    WO 1995-AU291
    A vehicle for delivery of bioactive mols. such as antigens via an oral or
AB
    injection route comprises encapsulated microparticles which attach to a
    mucosal surface such as the gut lining and resist breakdown by gastric
    acid secretions. The microparticles present the active mol. to the immune
     system in a protected carrier which allows slow release of the mols.
    These microparticle delivery vehicles are useful for delivering oral
     vaccines for humans and animals. Thus, a suspension of
     radiation-inactivated influenza virus was mixed with formalin-inactivated
    Haemophilus influenzae and allowed to coaggregate. An equal vol. of 5%
     chitosan soln. in 7% lactic acid was added, followed by dropwise addn. of
    CaCl2 soln. until gelling occurred; the gel was sonicated to form beads
    which were washed, dried, and administered orally to mice daily for 3 days
     to immunize them against influenza virus.
IT
     27555-50-6
    RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (film-coated microparticles for bioactive mol. delivery)
    ANSWER 46 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
ΑN
     1994:708329 HCAPLUS
DN
     121:308329
     Aminosugar and glycosaminoglycan composition for the treatment and repair
ΤI
     of connective tissue
IN
     Henderson, Robert W.
     Nutramax Laboratories, Inc., USA
PA
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PCT Int. Appl., 28 pp.

SO

CODEN: PIXXD2

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· DT
      Patent
 LA
      English
 FAN.CNT 2
      PATENT NO.
                       KIND
                              DATE
                                             APPLICATION NO.
                                                               DATE
 PΙ
      WO 9422453
                              19941013
                                             WO 1994-US3047
                                                               19940321
                        A1
          W: AU, BR, CA, CN, CZ, FI, HU, JP, KR, NO, NZ, PL
          RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                              19941115
      US 5364845
                        Α
                                             US 1993-40936
                                                               19930331
      US 5587363
                        Α
                              19961224
                                             US 1994-207581
                                                               19940314
      AU 9464901
                        Α1
                              19941024
                                             AU 1994-64901
                                                               19940321
      AU 688313
                        B2
                              19980312
      EP 693928
                        A1
                              19960131
                                             EP 1994-912281
                                                               19940321
             AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, PT, SE
          R:
                                             BR 1994-6178
      BR 9406178
                        Α
                              19960206
                                                               19940321
      JP 09503197
                        Т2
                              19970331
                                             JP 1994-522143
                                                               19940321
      JP 2971579
                        B2
                              19991108
                                             NO 1995-3853
      NO 9503853
                        Α
                              19950928
                                                               19950928
      FI 9504654
                        Α
                              19951113
                                             FI 1995-4654
                                                               19950929
 PRAI US 1993-40936
                              19930331
      US 1994-207581
                              19940314
      WO 1994-US3047
                              19940321
 AB
      A therapeutic compn. for the protection, treatment, and repair of
      connective tissue in humans and animals is provided, as is a method for
      the treatment of connective tissue in humans and animals by the
      administration of the compn. The compn. includes aminosugars and
      glycosaminoglycans. The aminosugar is selected glucosamine, glucosamine
      salts, and mixts. thereof. The glycosaminoglycan is selected from
      chondroitin, chondroitin sulfate, and mixts. thereof. The therapeutic
      compn. may also include a sol. manganese salt (e.g. manganese ascorbate)
      for humans and animals having a deficiency of manganese. Capsule
      formulations are included. Case studies with mammals are presented.
 IT
      66-84-2, Glucosamine hydrochloride 3416-24-8,
      Glucosamine 3416-24-8D, Glucosamine, salts 7512-17-6,
      N-Acetylglucosamine 9007-28-7, Chondroitin sulfate
      29031-19-4, Glucosamine sulfate
      RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (aminosugar and glycosaminoglycan pharmaceutical compn. for the
         treatment and repair of connective tissue)
 L92
      ANSWER 47 OF 51 HCAPLUS COPYRIGHT 2001 ACS
 ΑN
      1994:541650 HCAPLUS
      121:141650
 DN
 ΤI
      Vaccine preparations in stable particulate forms
 IN
      Cox, John Cooper; Sparks, Robert Edward; Jacobs, Irwin Clay; Mason,
      Norbert Simon
      CSL Ltd., Australia PCT Int. Appl., 36 pp.
 PA
 SO
      CODEN: PIXXD2
 DT
      Patent
 LA
      English
 FAN.CNT 1
      PATENT NO.
                                             APPLICATION NO.
                       KIND
                              DATE
                                                               DATE
 PΙ
                              19940721
                                             WO 1993-AU677
                                                               19931224
      WO 9415636
                        A1
          W: AU, CA, JP, KR, NZ, US
          RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
      CA 2152949
                                             CA 1993-2152949 19931224
                        AA
                              19940721
                                             AU 1994-58053
      AU 9458053
                        A1
                              19940815
                                                               19931224
      AU 667003
                              19960229
                        B2
                                             EP 1994-903697
                        Α1
                              19951025
                                                               19931224
      EP 678035
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
                        T2
                                             JP 1993-515529
                                                              19931224
      JP 08505152
                              19960604
                              19990511
                        Α
                                             US 1995-481403
                                                               19950710
      US 5902565
 PRAI US 1993-2485
                              19930108
```

```
19931224
     WO 1993-AU677
AΒ
     An immediate-release prepn. comprises an immunogen adsorbed to
     an aluminum salt adjuvant and a controlled- or delayed-
     release prepn. comprises microspherical particles comprising a
     continuous matrix of biodegradable polymer contg. discrete,
     immunogen-contg. regions. The prepns. offer a no. of advantages; (1) the
     immunogen is held in a selected configuration during the drying process,
     (2) adjuvant is available to stimulate the immune system at every pulsed
     release, and (3) during in vivo residence time, while delayed-
     release polymer is undergoing biodegrdn., the immunogen is
     protected from thermal and perhaps enzymic denaturation by attachment to a
     solid support.
TT
     3416-24-8, Glucosamine
     RL: BIOL (Biological study)
        (controlled-release vaccine prepns. contg., as
        stabilizer)
    ANSWER 48 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
     1993:27479 HCAPLUS
AN
DN
     118:27479
ΤI
     Gastroresistant pharmaceutical formulations for oral
     administration containing bile acids
     Marchi, Egidio; Tamagnone, Gianfranco; Rotini, Leone Gabriele
TN
PΑ
     Alfa Wassermann S.p.A., Italy
SO
     Eur. Pat. Appl., 18 pp.
     CODEN: EPXXDW
DΤ
     Patent
LA
     English
FAN.CNT 1
                      KIND
                           DATE
                                           APPLICATION NO.
                                                            DATE
     PATENT NO.
                      ----
                            _____
                     A1
PT
     EP 509335
                            19921021
                                           EP 1992-105716
                                                            19920402
     EP 509335
                     B1
                            19960821
        R: BE, DE, ES, FR, GB, NL
                    Α
                            19950110
                                           US 1992-861466
                                                            19920401
     US 5380533
                       Т3
                            19961016
                                           ES 1992-105716
                                                            19920402
     ES 2090395
     CA 2065773
                      AΑ
                            19921013
                                           CA 1992-2065773
                                                            19920410
     JP 05097676
                            19930420
                      A2
                                           JP 1992-91130
                                                            19920410
     JP 2509045
                      B2
                            19960619
     KR 9705176
                       В1
                            19970414
                                           KR 1992-6052
                                                            19920411
PRAI IT 1991-B0113
                      Α
                            19910412
     The title gastroresistant oral pharmaceutical comprises bile
     acids and basic substances which favor bile acids salification and
     therefore bile acid absorption in the intestinal tract for treatment of
     biliary diseases. A tablet contained ursodeoxycholic acid (I)
     450, Na2CO3 100, reticulated polyvinylpyrrolidone 21, microgranular
     cellulose 210, Mg stearate 12, talc 6, hydroxypropyl Me
     cellulose 14, PEG-6000 0.2, TiO2 3.2, talc 3.2, hydroxypropyl Me
     cellulose phthalate 38.4, and acetylated monoglyceride 3.8 mg.
     The av. increase of bioavailability (AUC) of I was 41.06 as compared to
     30.73.mu.mol/L/8h for the controls.
IT
     3416-24-8 9004-65-3
     RL: BIOL (Biological study)
        (pharmaceuticals contg. bile acids and, gastroresistant oral)
     ANSWER 49 OF 51 HCAPLUS COPYRIGHT 2001 ACS
L92
ΑN
     1991:435758 HCAPLUS
DN
     115:35758
ΤI
     Controlled-release injections containing pseudoplastic
     polysaccharide matrixes
IN
     Fjellstroem, Torsten
     Medinvent S. A., Swed.
PA
SO
     PCT Int. Appl., 17 pp.
     CODEN: PIXXD2
DT
     Patent
```

LA

English

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FAN.CNT 1
                      KIND
     PATENT NO.
                            DATE
                                           APPLICATION NO.
                                                            DATE
     WO 9105544
                            19910502
                                           WO 1990-SE683
                                                             19901022
PΙ
                      A1
         W: AU, CA, JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
     SE 8903503
                      Α
                            19910424
                                           SE 1989-3503
                                                            19891023
     SE 465950
                       В
                            19911125
     SE 465950
                      С
                            19920319
                      AΑ
     CA 2067228
                            19910424
                                           CA 1990-2067228
                                                            19901022
    AU 9066237
                      A1
                            19910516
                                           AU 1990-66237
                                                            19901022
                            19930107
    AU 632634
                       B2
    EP 497846
                      A1
                            19920812
                                           EP 1990-916175
                                                             19901022
    EP 497846
                      В1
                            19960925
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL
                            19930624
     JP 05503921 T2
                                           JP 1990-514918
                                                            19901022
                       B2
                            20000313
     JP 3017801
    AT 143257
                      E
                            19961015
                                           AT 1990-916175
                                                             19901022
                      Α
     US 5614221
                            19970325
                                           US 1994-344707
                                                            19941121
PRAI SE 1989-3503
                      Α
                            19891023
                     Α
     WO 1990-SE683
                            19901022
    US 1992-848958
                      A1
                            19920423
AB
     An injection system for hormones, growth factors, enzymes, antibiotics,
     and combinations thereof comprises a polysaccharide matrix having
    pseudoplastic properties, wherein the active substances are aggregated
     with D,L-polylactide to provide a slow release or depot action.
    polysaccharide matrix is selected from the group consisting of
     glucosaminoglucans, hydroxyethyl cellulose, CM
     cellulose, and xanthan gum. Thus, albumins were
     encapsulated with high-mol.-wt. D, L-polylactide to obtain large
    beads of lactide aggregated albumin (15 .mu.m in diam.), which were
     incorporated into a pseudoplastic gel (no specific compds. were given).
     In vitro dissoln. expts. showed that the higher the lattice content, the
     longer duration of the drug delivery.
     9004-32-4, Carboxymethyl cellulose 9004-62-0,
ΙT
    Hydroxyethyl cellulose
    RL: BIOL (Biological study)
        (as drug-polylactide aggregate carrier, for slow-release injection
        systems)
L92
    ANSWER 50 OF 51 HCAPLUS COPYRIGHT 2001 ACS
ΑN
     1990:25582 HCAPLUS
DN
     112:25582
ΤI
    N-acetylation in chitosan and the rate of its enzymic hydrolysis
ΑU
    Hirano, Shigehiro; Tsuchida, Hisaya; Nagao, Norio
CS
     Dep. Agric. Biochem. Biotechnol., Tottori Univ., Tottori, 680, Japan
    Biomaterials (1989), 10(8), 574-6
CODEN: BIMADU; ISSN: 0142-9612
SO
DT
     Journal
LA
     English
     Partially N-acetylated derivs. [degree of substitution (d.s.) 0.2, 0.4,
AB
     0.6 and 0.8 for N-acetyl] of chitosan were prepd. from prawn shell
     chitosan, and their susceptibility towards a lysozyme from hen egg white,
     three microbial chitinases and a chitinase from potato skins was examd.
     The partially N-acetylated derivs. (d.s. 0.4-0.8 for N-acetyl) were
     1.5-4.0 times more digestible than N-acetylchitosan (d.s. 1.0 for
     N-acetyl), and their enzymic hydrolysis rate is controlled by the d.s. for
    N-acetyl group. These data suggest that chitosan is usable as a
     digestible material in the biomedical and biotechnol. fields.
     3416-24-8, D-Glucosamine 7512-17-6, N-Acetyl-D-
ΙT
     glucosamine
     RL: FORM (Formation, nonpreparative)
        (formation of, as enzymic hydrolysis product of chitosan partially
        acetylated derivs., biomaterials in relation to)
```

L92 ANSWER 51 OF 51 HCAPLUS COPYRIGHT 2001 ACS.

```
ΑN
     1988:226885 HCAPLUS
DN
     108:226885
ΤI
ΙN
```

Chitosan matrix for sustained-release pharmaceuticals containing angiotensin-converting enzyme inhibitors or ascorbic acid

Thakur, Ajit B.; Jain, Nemichand B.

PASquibb, E. R., and Sons, Inc., USA

U.S., 5 pp. SO CODEN: USXXAM

DT Patent English LΑ

FAN.CNT 1

PΙ

PATENT NO. KIND DATE APPLICATION NO. DATE ----\_\_\_\_\_ \_\_\_\_\_ US 4738850-Α 19880419 US 1986-867846 19860527

AΒ A controlled-release formulation from which a drug selected from angiotensin-converting enzyme (ACE) inhibitors and ascorbic acid is released in neutral or acidic environments contains a reactive matrix of 5-80% drug in combination with 5-70% poly[(1.fwdarw.4)-2-amino-2-deoxy-.beta.-glucose]. Sustainedrelease tablets were prepd. contg. 1-[(2S)-3-mercapto-2-/ methylpropionyl]-L-proline (captopril) 100.0, chitosan / (90% deacetylated) 100.0, lactose 10.0, and Mg stearate 1.0 mg or ascorbic acid 100.0, chitosan 100.0, lactose 10.0, and stearic acid 1.0  $m_2$ . \ Both tablets underwent zero-order release and released the drug slowly and uniformly over an 8-h period in neutraV and acidic environments.

TΨ 62529-75-3

> RL: BIOL (Biological study) (pharmaceuticals contg. angiotensin-converting enzyme inhibitors or ascorbic acid and, for sustained delivery in acidic or neutral environment)

## => fil medline

FILE 'MEDLINE' ENTERED AT 13:44:18 ON 25 JUN 2001

FILE LAST UPDATED: 18 JUN 2001 (20010618/UP). FILE COVERS 1958 TO DATE.

On April 22, 2001, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE now contains new records from the former NLM HEALTH STAR database. These records have an Entry Date and Update Date of 20010223.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2001 vocabulary. Enter HELP THESAURUS for details.

The OLDMEDLINE file segment now contains data from 1958 through 1965. Enter HELP CONTENT for details.

Left, right, and simultaneous left and right truncation are available in the Basic Index. See HELP SFIELDS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

## => d all

L99 ANSWER 1 OF 1 MEDLINE MEDLINE AN 97155121

PubMed ID: 9001835 DN

TΙ Pilot study of oral polymeric N-acetyl-D-glucosamine as a potential treatment for patients with osteoarthritis.

ΑU Talent J M; Gracy R W

Department of Biochemistry and Molecular Biology, University of North CS Texas Health Science Center, Fort Worth, USA.

CLINICAL THERAPEUTICS, (1996 Nov-Dec) 18 (6) · 1184-90. SO

```
Journal code: CPE; 7706726. ISSN: 0149-2918.
CY
    United States
DT
     (CLINICAL TRIAL)
     Journal; Article; (JOURNAL ARTICLE)
     (RANDOMIZED CONTROLLED TRIAL)
    English
LA
FS
     Priority Journals
    199704
EM
     Entered STN: 19970422
ED
     Last Updated on STN: 19970422
     Entered Medline: 19970408-
   Glucosamine and its derivatives, such as glucosamine sulfate and
AB
     N-acet<u>yl-D</u>-glucosamine (NAG), have been shown to be effective in the
     treatment of patients with osteoarthritis. Unfortunately, the half-life of
     glucosamine in the blood is relatively short; therefore, a
     sustained-release form of the compound would be highly /
    desirable. The purpose of this pilot study was to determine whether the
    polymeric form of NAG (POLY-Nag) could provide a longer-lasting oral
     source of NAG. Ten healthy subjects each ingested 1 g/d of either NAG or
     POLY-Nag for 3 days. After a 4-day washout period, each subject was
     crossed over to receive the other compound for 3 days. Serum samples were
    collected and analyzed using high-performance liquid chromatography.
    Results show that orally ingested NAG and POLY-Nag are absorbed, resulting
     in increased serum levels of NAG, and POLY-Nag appears to be at least as
    effective as NAG. Serum levels of NAG had decreased by 48 hours after
    cessation of ingestion of NAG or POLY-Nag but were still above baseline
    levels. Increases in serum glucosamine levels indicate that NAG and
    POLY-Nag are converted to glucosamine in vivo. In conclusion, POLY-Nag may
    provide a source of serum glucosamine for treatment of patients with
    osteoarthritis. Longer and more rigorous pharmaco-kinetic and clinical
    studies need to be done.
CT
    Check Tags: Female; Human; Male; Support, Non-U.S. Gov't
     Absorption
        Acetylglucosamine: PK, pharmacokinetics
       *Acetylglucosamine: TU, therapeutic use
      Administration, Oral
      Adult
      Chromatography, High Pressure Liquid
      Cross-Over Studies
      Follow-Up Studies
        Glucosamine: PK, pharmacokinetics
        Glucosamine: TU, therapeutic use
      Half-Life
     Middle Age
     Osteoarthritis: BL, blood
     *Osteoarthritis: DT, drug therapy
      Pilot Projects
      Polymers: PK, pharmacokinetics
      Polymers: TU, therapeutic use
      Reference Values
      Treatment Outcome
RN
     3416-24-8 (Glucosamine); 7512-17-6 (Acetylglucosamine)
CN
     0 (Polymers)
=> fil wpix
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                                                <200134/DW>
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    SEE http://www.derwent.com/covcodes.html <<<
=> d all abeq tech tot
L125 ANSWER 1 OF 13 WPIX
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     2000-099541 [09]
                       WPIX
ΑN
DNC
     C2000-029061
     Treating or preventing early stages of degeneration of articular cartilage
ΤI
     or subchondral bone in joints comprises administering chondroprotective
     compound.
DC
     B05
     EVANS, N A; KILROY, C R; LUNDY, K M; PELLETIER, J; RICKETTS, A P
IN
     (PFIZ) PFIZER PROD INC
PA
CYC
     32
     EP 970694
                   A2 20000112 (200009)* EN
                                               29p
                                                      A61K031-405
PΙ
         R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
            RO SE SI
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     JP 11349480
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                   A1 19991122 (200018)
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                                                      A61K031-40
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     HU 9901698
                   A2 20000228 (200020)
                                                      A61K031-40
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                   A 19991227 (200059)
                                                      A61K031-40
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     KR 99088495
     NZ 335897
                  · A
                      20000929 (200066)#
                                                      A61K031-41
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                                               56p
                   A 20010131 (200110)
                                                      C07D000-00
                                                                       <--
     ZA 9903478
    EP 970694 A2 EP 1999-303528 19990505; AU 9931208 A AU 1999-31208 19990521;
ADT
     JP 11349480 A JP 1999-143159 19990524; CA 2272463 A1 CA 1999-2272463
     19990520; HU 9901698 A2 HU 1999-1698 19990521; KR 99088495 A KR 1999-18561
     19990521; NZ 335897 A NZ 1999-335897 19990521; ZA 9903478 A ZA 1999-3478
     19990521
PRAI US 1998-86457
                      19980522; NZ 1999-335897
                                                  19990521
IC
     ICM A61K031-40; A61K031-405; A61K031-41; C07D000-00
          A61K009-22; A61K009-28; A61K009-52; A61K031-00; A61K045-06
ICA
     C07D209-88
AΒ
     EΡ
           970694 A UPAB: 20000218
     NOVELTY - Treating or preventing early stages of degeneration of articular
     cartilage or subchondral bone in one or more joints of a mammal comprises
     establishing the need for treatment and administering a chondroprotective
     compound.
          DETAILED DESCRIPTION - Treating or preventing early stages of
     degeneration of articular cartilage or subchondral bone in one or more
     joints of a mammal in need of treatment, comprising:
          (1) establishing the status of the mammal as presently or
     prospectively being in the early stages and in need of treatment; and
          (2) administering a chondroprotective compound of formula (I):
          R2 = -(C(X)(Y))n-CO-A;
          A = OH, 1-4C alkoxy, amino, hydroxy-amino, and mono- or
     di-(1-2C)-alkylamino;
          X, Y = H \text{ or } 1-2C \text{ alkyl};
     n = 1 \text{ or } 2;
          R6 = halo, 1-3C alkyl, -CF3, or NO2;
          R9 = H; 1-2C alkyl; -CO-R; phenyl or -(1-2C)-alkyl-phenyl (both
     optionally substituted on the phenyl ring by F or Cl);
          R = 1-2 C alkyl, phenyl (optionally substituted on the phenyl ring by
     F or Cl), or -CO2R1; and
          R1 = 1-2 C alkyl:
          including its (-)(R) and (+)(S) enantiomers and salts, prodrugs and
     metabolites which are active for treating or preventing early stages of
     degeneration of articular cartilage or subchondral bone.
```

An INDEPENDENT CLAIM is also included for a package for use in

commerce for treating or preventing early stages of degeneration of articular cartilage or subchondral bone in one or more joints of a mammal, comprising an outer carton and inner container removably housed therein; enclosed in which is a dosage form of (I), and associated instructions and information attached to the carton or container enclosed in the carton, or displayed as an integral part of the carton or container. The instructions / information stating in words that (I) will ameliorate, diminish, actively treat, reverse or prevent any injury, damage or loss of articular cartilage or subchondral bone subsequent to the early stages of the degeneration. ACTIVITY - Antiinflammatory; Antiarthritis; Osteopathic. USE - Carprofen in mammals is used to treat and prevent cartilage and subchondral bone injury and loss in inflamed joints. Dwq.0/0CPI AB; GI; DCN CPI: B01-B02; B04-C01C; B06-A01; B06-A02; B06-D02; B06-D09; B06-D13; B07-D08; B10-A08; B10-B02D; B10-D03; B12-M10; B12-M11B; B12-M11C; B14-C03; B14-C09; B14-C09A UPTX: 20000218 TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Chondroprotective: (I) exists as (-)(R and (+)(S) enantiomers, and the (+)(S) enantiomer is used alone. Preferred Mammal: The mammal is preferably a cat, dog or horse, and the treatment or prevention ameliorates, diminishes, actively treats, reverses or prevents any injury, damage or loss of articular cartilage or subchondral bone subsequent to the early stage of degeneration. The status of the mammal is determined by: (A) positive results from clinical examination and evaluation of the joints of the mammal, including measurement of hip dysplasia progression; (B) performance of any invasive surgical procedure on one or more joints of the mammal; (C) positive results and magnetic resonance imaging (MRI); and (D) positive results from any biochemical test performed on body fluids or joint tissue of the mammal with respect to one or more of: (1) increased interleukin-1 beta (IL-beta); (2) increased tumor necrosis factor alpha (TNFalpha); (3) increased ratio of IL-beta to IL-1 receptor antagonist protein (IRAP); (4) increased expression of p55 TNF receptors (p55 TNF-R); (5) increased interleukin-6 (IL-6); increased leukemia inhibitory factor (6) unchanged or decreased insulin-like growth factor-1 (IGF-1); (7) decreased transforming growth factor beta (TGFbeta); unchanged or decreased platelet-derived growth factor (PDGF); (8) unchanged or decreased basic fibroplast growth factor (b-FGF); (9) increased keratan sulfate; (10) increased matrix metalloproteases (MMPs) including stromelysin; (11) increased ratio of matrix metalloproteases (MMPs) including stromelysin, to tissue inhibitor of metalloproteases (TIMP); (12) increased osteocalcin; (13) increased alkaline phosphatase; (14) increased cAMP responsive to hormone challenge; (15) increased urokinase plasminogen activator (uPA); (16) increased cartilage oligomeric matrix protein; (17) presence of type-II specific collagen neoepitopes; and (18) increased collagenase. Preferred Composition: (I) are administered with: (A) more than one (I); or (B) one or more (I) administered with one or more polysulfated

FS

FA

MC

TECH

- minocycline.
  (I) are administered with other agent(s), comprising:
- (A) where one or more joints has become seriously infected at the same

glycosaminoglycan (PSGAG), glucosamine, chondroitin sulfate (CS); hyaluronic acid (HA), pentosan polysulfate (PPS), doxycycline, and

```
time by microorganisms comprising bacteria, fungi, protozoa or virus, (I) in combination with one or more antibiotic, antifungal, antiprotozoal, or antiviral agents;
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- (B) in combination with one or more H1-receptor antagonists, kinin-B1- and B2-receptor antagonists; leukotriene LTC4-, LTD4/LTE4-, and LTB-inhibitors; PAF-receptors antagonists; gold in the form of an aurothio group with hydrophilic groups; immunosuppressive agents selected from cyclosporine, azathioprine, and methotrexate; antiinflammatory glucocorticoids, e.g. dexamethasone, broad-spectrum antiparasitic antibiotics, e.g. avermectins and milbemycins; penicillamine; hydroxychloroquine; anti-gout agent colchicine; xanthine oxidase inhibitor allopurinol; and uricosuric agents selected from probenecid, sulfinpyrazone, and benzbromarone; and
- (C) in combination with agents for the treatment of disease conditions, syndromes and symptoms found in older mammals, comprising one or more members selected from cognitive therapeutics to counteract memory loss and impairment, antidyskinetic/antiparkinsonian agents, e.g. selegeline; cardiovascular drugs to offset athersclerosis, including hypertension, myocardial ischemia including angina, congestive heart filure, and myocardial infarction, selected from diuretics, vasodilators, beta-adrenergic receptor antagonists, angiotesin-II converting enzyme inhibitors (ACE-inhibitors) used to treat geriatric mammals with mitral insufficiency, enalapril alone and in combination with neutral endopeptidase inhibitors, angiotensin II receptor antagonists, renin inhibitors, calcium channel blockers, sympatholytic agents, alpha2-adrenergic agonists, alpha-adrenergic receptor antagonists, and HMG-CoA-reductase inhibitors (anti-hypercholesterolemics); antineoplastic agents, antimitolic drugs including vinblastine and vincristine; growth hormone secretagogues, strong analgesics, local and systemic anesthetics; and H2-receptor antagonists and other gastroprotective agents.

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L125 ANSWER 2 OF 13 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
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AN 2000-023140 [02] WPIX

DNC **C2000-005571** 

TI Composition for treatment of inflammatory bowel disease containing glucosamine derivative.

DC A96 B03

IN FRENCH, I W; MURCH, S

PA (GLUC-N) GLUCOGENICS PHARM INC; (FREN-I) FRENCH I W; (MURC-I) MURCH S

CYC 82

PI WO 9953929 A1 19991028 (200002)\* EN 40p A61K031-70 <-RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SL SZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW

A1 19991017 (200013) CA 2234936 ENA61K031-70 <--<--19991108 (200014) AU 9927092 Α A61K031-70 A61K031-70 <--US 6046179 Α 20000404 (200024)# 20001120 (200103) NO 2000005223 A A61K000-00 EP 1071432 A1 20010131 (200108) EN A61K031-70 R: DE ES FR GB IT NL

ADT WO 9953929 A1 WO 1999-CA218 19990312; CA 2234936 A1 CA 1998-2234936 19980417; AU 9927092 A AU 1999-27092 19990312; US 6046179 A US 1999-261194 19990303; NO 2000005223 A WO 1999-CA218 19990312, NO 2000-5223 20001017; EP 1071432 A1 EP 1999-907220 19990312, WO 1999-CA218 19990312

FDT AU 9927092 A Based on WO 9953929; EP 1071432 A1 Based on WO 9953929 PRAI CA 1998-2234936 19980417; US 1999-261194 19990303

IC ICM A61K000-00; A61K031-70

ICS A61K009-00; A61K009-02

AB WO 9953929 A UPAB: 20000112

NOVELTY - A composition for treating inflammatory bowel disease comprises N-acetylglucosamine (NAG) and a carrier adapted for delivery to the bowel. ACTIVITY - Antiinflammatory; antiulcer.

MECHANISM OF ACTION - None given.

USE - For treating inflammatory bowel disease (including ulcerative colitis, Crohn's disease and chronic proctitis).

Patients with lower inflammatory bowel disease received NAG by rectal enema, 1-2 g, three times daily. The initial 3 patients had symptomatic clinical improvement within 48 hours of initiating therapy. Pre- and post-biopsies of the colon showed that after 6 weeks of therapy, there was a significant improvement in the histopathology of the bowel wall.

ADVANTAGE - NAG is non-toxic.

Dwg.0/4

FS CPI

FA AB; DCN

MC CPI: A12-V01; B04-B01C1; B04-C03A; B04-C03B; B04-C03C; B04-N02; B10-A07; B10-E02; B10-E04D; B12-M08; B12-M09; B14-E10C

TECH UPTX: 20000112

TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Composition: A preferred composition in the form of a foam comprises 0.5-5 g NAG and 20 g foam containing propylene glycol, emulsifying wax, polyoxyethylene-10-stearyl ether, cetyl alcohol, methylparaben, propylparaben, trolamine, purified water and inert propellants (dichlorodifluoromethane or dichlorotetrafluoroethane). An alternative composition comprises 0.1-90 wt.% NAG coated with 5-29 wt.% hydrophilic polymer and 0.5-25 wt.% acrylic polymer which dissolves at pH 5-7.5.

L125 ANSWER 3 OF 13 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1997-244430 [22] WPIX

CR 1995-224100 [29]; 1997-042814 [04]; 2000-375540 [31]

DNC C1997-079173

TI Purified poly-N-acetyl-glucosamine and poly-glucosamine - derived from marine micro-algae, used as cell culture substrates.

DC B04 D16 D21

IN FINKIELSZTEIN, S; HELTON, M; PARISER, E R; VOURNAKIS, J N

PA (MARI-N) MARINE POLYMER TECHNOLOGIES INC

CYC 1

AB

PI US 5623064 A 19970422 (199722)\* 89p C08B037-08 <--

ADT US 5623064 A CIP of US 1993-160569 19931201, US 1994-347911 19941201

PRAI US 1994-347911 19941201; US 1993-160569 19931201

IC ICM C08B037-08

ICS A61K031-73; C12P019-26

US 5623064 A UPAB: 20000706

The following are claimed:

- (1) a poly- beta  $-1 \Rightarrow 4-N$ -acetylglucosamine (I) comprising 4000-150000 N-acetylglucosamine monosaccharide units covalently attached in a beta  $-1 \Rightarrow 4$  conformation and having a molecular weight of 800-30000 kDa, where (I) is free of protein and substantially free of other organic and inorganic contaminants;
- (2) a poly- beta -1 => 4-glucosamine (II) comprising 4000-150000 glucosamine monosaccharide units and having a molecular weight of 640-24000 kDa, where (II) is free of protein and substantially free of other organic and inorganic contaminants;
- (3) derivatives of (I) in which at least 1 N-acetylglucosamine unit has been deacetylated;
- (4) derivatives of (II) in which at least 1 glucosamine unit has been acetylated;
- (5) derivatives of (I) and (II) in which at least 1 monosaccharide unit contains a sulphate, sulphonyl, O-acyl, N-acyl, O-alkyl, N-alkyl, N-alkylidene or N-arylidene [sic] group;
- (6) derivatives of (I) and (II) in which at least 1 monosaccharide unit is in the form of a phosphorylated derivative, a nitrated derivative, an alkali derivative or a deoxy-halogen derivative;
- (7) derivatives of (I) and (II) in which at least 1 monosaccharide unit forms a salt or a metal chelate, and
- (8) derivatives of (I) and (II) in which at least 1 monosaccharide unit contains lactate.

USE - The compounds are used as cell culture substrates; for the production of mats, strings, ropes, microspheres, microbeads, membranes, fibres, powders or sponges; for the production of 3-dimensional matrix

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formulations (all claimed); for applications in the biomedical, pharmaceutical, agrochemical, food, cosmetic and chemical engineering industries; as carriers for controlled drug release; as cell encapsulation systems, and for prevention of post-surgical adhesions. ADVANTAGE - Problems of unpredictable raw material variability associated with chitin and chitosan are overcome, since (I) can be produced in highly crystalline form by culturing marine microalgae (especially diatoms) under carefully controlled aseptic conditions. Dwg.0/31 CPI AB; DCN CPI: B04-C02E; B04-C02F; B14-N17B; D05-C08; D05-H01; D08-B10 COPYRIGHT 2001 DERWENT INFORMATION LTD L125 ANSWER 4 OF 13 WPIX 1995-224100 [29] WPIX 1997-042814 [04]; 1997-244430 [22]; 2000-375540 [31] C1995-103080 New poly-beta-N-acetyl-glucosamine and deacylated deriv. - isolated from diatoms, useful as cell culture substrates for controlled drug delivery, cell encapsulation, and to reduce post-surgical adhesions. A11 A96 B04 B07 C07 D16 D21 D22 G03 G06 FINKIELSZTEIN, S; HELTON, M; PARISER, E R; VOURNAKIS, J N (MARI-N) MARINE POLYMER TECHNOLOGIES INC 59 A1 19950608 (199529) \* EN 198p C08B037-08 WO 9515343 <--RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ W: AM AU BB BG BR BY CA CN CZ EE FI GE HU JP KE KG KR KZ LK LR LT LV MD MG MN MW NO NZ PL RO RU SD SI SK TJ TT UA UZ VN <--AU 9512969 A 19950619 (199540) C08B037-08 C08B037-08 EP 731812 A1 19960918 (199642) EN <--R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE 52p US 5622834 A 19970422 (199722) C12P019-26 <--W 19970617 (199734) JP 09506126 152p C08B037-08 <--A4 19970618 (199746) EP 731812 C08B037-08 <--NZ 277662 A 19980427 (199823) C08B037-08 <--В 19980827 (199846) C08B037-08 AU 695850 <--CN 1142833 A 19970212 (200050) <--C08B037-08. WO 9515343 A1 WO 1994-US13706 19941201; AU 9512969 A AU 1995-12969 19941201; EP 731812 A1 WO 1994-US13706 19941201, EP 1995-904174 19941201; US 5622834 A US 1993-160569 19931201; JP 09506126 W WO 1994-US13706 19941201, JP 1995-515721 19941201; EP 731812 A4 EP 1995-904174 NZ 277662 A NZ 1994-277662 19941201, WO 1994-US13706 19941201; AU 695850 B AU 1995-12969 19941201; CN 1142833 A CN 1994-194912 19941201 AU 9512969 A Based on WO 9515343; EP 731812 A1 Based on WO 9515343; JP 09506126 W Based on WO 9515343; NZ 277662 A Based on WO 9515343; AU 695850 B Previous Publ. AU 9512969, Based on WO 9515343 PRAI US 1993-160569 19931201 07Jnl.Ref; EP 543572; US 3988411; US 3989535; WO 9312875; No-Citns. ICM C08B037-08; C12P019-26 TCS A61K031-73 WO 9515343 A UPAB: 20001010 New isolated poly- beta -1-4-N-acetylglucosamine (I) has about 40 000-150 000 N-acetylglucosamine monomers covalently attached in the beta -1-4 configuration. the cpd. has a mol. wt. of 0.8-3.0 multiply 106 Da and is free of protein and other (in)organic contaminants. Also claimed are: (1) similar poly- beta -1-4-glucosamines (II) of mol. wt. 0.64-24 multiply 106Da, opt. having at least 1 monomer acetylated; (2) encapsulation prods. consisting of (I) or (II) and a drug (A); (3) hybrids of (I) and (II) crosslinked to collagen; (4) (I) and (II) with at least 1 peptide (B) functionally attached to a deacetylated monomer; and (5) cells encapsulated by (I) or (II). USE - (I) and (II) are used as cell culture substrates and are formed as mats, strings, ropes, microspheres, microbeads, sponges, membranes, fibres or powders, pref. with a 3-D matrix. They are also used for

controlled drug delivery (i.e. gradual release of (A) or (B) as the polysaccharide degrades), partic. for treating tumours, infections,

inflammation etc., or as spermicide; and specifically where (I) or (II) is a lactate, and for redn. of post-surgical adhesions (all claimed). The encapsulated cells can be admin. in vivo either to provide therapeutic agent (e.g. insulin) expressed by the cells, or to seed tissue regeneration. Very many other uses of (I) and (II), or their derivs. are described e.g. synthesis of new plastics; as wound dressings; as anticoagulants (when sulphated); as agricultural pesticides; for controlled release of agricultural chemicals; in foods and cosmetics; as metal-to-polymer adhesives; and as chelating agents in photography. ADVANTAGE - (I) is easy to prepare in pure form with consistent properties. It is non-toxic, non-pyrogenic, biodegradable (at a predictable rate), biocompatible, non-immunogenic and can be attached to hard or soft tissue without use of sutures. Dwg.14/31 CPI AB; GI; DCN CPI: A03-A05; A03-C01; A12-V01; A12-W05; A12-W11L; B04-C02; C04-C02; B12-M10A; C12-M10A; B14-A01; C14-A01; B14-C03; C14-C03; B14-H01B; C14-H01B; B14-P01A; C14-P01A; D05-H01; D05-H02; D05-H13; D08-B10; D09-C04B; G02-A05D ABEQ US 5622834 A UPAB: 19970530 A method for isolating poly-beta-1-4-N-acetylglucosamine comprising 4,000 to 150,000 N-acetylglucosamine monosaccharides covalently attached in a beta-1-4 conformation, free of protein, substantially free of other organic contaminants, and having a molecular weight of 800 thousand daltons to 30 million daltons comprises: (a) culturing a microalgae comprising a cell body and a poly-beta-1-4N-acetylglucosamine fibre in a sterile culture solution having a neutral pH; (b) agitating the culture in step (a) about every 8 to 12 hours; (c) subjecting the microalgae to a mechanical force for a time sufficient to separate the cell body from the poly-beta-14-N-acetylglucosamine fibre; (d) segregating the poly-beta-1-4-N-acetylglucosamine fibre from the cell body; and (e) treating the poly-beta-1-4-N-acetylglucosamine fibre with an organic solvent or a detergent, so that all protein, substantially all other organic contaminants, and substantially all inorganic contaminants are removed from the segregated poly-beta-1-4-N-acetylglucosamine fibre, and the poly-beta-1-4-N-acetylglucosamine is isolated. Dwg.0/17 L125 ANSWER 5 OF 13 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD 1995-099876 [14] WPIX C1995-045356 Prodn. of wood protection medium - using material based on poly-N-acetyl-glucosamine. A11 C03 D22 F09 P63 TOFT, L (DATE-N) DANSK TEKNOLOGISK INST AFD BIOTEKNIK DK 9300789 A 19950103 (199514)\* B27K003-36 DK 9300789 A DK 1993-789 19930702 PRAI DK 1993-789 19930702 ICM B27K003-36 9300789 A UPAB: 19950412 Wood protection medium is produced using poly-N-acetyl glucosamine which protects against decomposition or destructive organisms e.g. bacteria, fungi and insects in material contg. cellulose. The depolymerisation of poly-N-acetyl glucosamine produces N-acetyl-D(+)-glucose amine and the removal of acetyl gives 2-amino-2-deoxyglucose. The removal of amine from 2-amino-2- deoxyglucose gives 2-deoxyglucose, which is also a protective USE - The medium is used to protect wood against decomposition or destructive organisms. CPI GMPI

CPI: A03-A00A; A12-B09; C04-C02; C10-A07; C14-A01; C14-A04; C14-B04B;

FS FΑ

MC

ΑN

ΤI

DC

IN

PA

CYC PΙ

ADT

IC

AΒ

FS

ΓA

MC

AB; DCN

D09-A01; F05-B01

DNC

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L125 ANSWER 6 OF 13 WPIX
                            COPYRIGHT 2001
                                             DERWENT INFORMATION LTD
     1994-114309 [14]
ΑN
                        WPTX
DNN N1994-089821
                        DNC C1994-052437
TI
     Chitin compsn. for bone formation factor - comprising poly-CN-Acete-d-
     glucosamine.
DC
     A11 A96 B04 D22 P32 P34
PA
     (NIRA) UNITIKA LTD
CYC
     1
PΙ
     JP 06063117
                   A 19940308 (199414)*
                                                4p
                                                      A61L027-00
ADT
     JP 06063117 A JP 1992-239013 19920813
PRAI JP 1992-239013
                      19920813
IC
     ICM A61L027-00
         A61F002-28
     TCS
     JP 06063117 A UPAB: 19940524
AB
     The compsn. is formed by contg. chitin in a bone forming factor.
          The chitin compsn. pref. comprises Poly(N-acetyl-D-glucosamine).
          USE/ADVANTAGE - Used in forming bone. The chitin compsn. controls the
     release of the bone forming factor in an organism and induces bone
     formation and is decomposed in the organism together with bone formation.
     The chitin compsn. has good affinity to an organism and has no foreign
    matter reaction in the organism. It has good sustained release of the bone
     forming factor and exhibits sufficient bone forming capability.
     Dwg.0/0
FS
    CPI GMPI
FA
    AB; DCN
     CPI: A03-A00A; A12-V02; B04-C02E3; B04-C03; B12-M10A; B14-E11; D09-C01D
MC
L125 ANSWER 7 OF 13 WPIX
                            COPYRIGHT 2001
                                             DERWENT INFORMATION LTD
     1993-199743 [25]
ΑN
                        WPIX
ΤI
     Compsn. for determn. of lysozyme activity - comprises cellulose and
     N-acetyl glucosamine.
DC
     B04 D16
     (NAKA-N) NAKANO VINEGAR CO LTD
PA
CYC
PΙ
     JP 05123192
                  A 19930521 (199325)*
                                                      C12Q001-34
ADT
    JP 05123192 A JP 1991-313078 19911101
PRAI JP 1991-313078
                      19911101
     ICM C12Q001-34
IC
FS
    CPI
FΑ
    NOAB; DCN
MC
    CPI: B04-B02C3; B04-C02A1; B10-A07; B11-C07B2; B12-K04; D05-A02C; D05-H09
L125 ANSWER 8 OF 13 WPIX
                            COPYRIGHT 2001
                                             DERWENT INFORMATION LTD
AN
    1992-200141 [24]
                        WPIX
DNC
    C1992-091105
TI
    Glucosamine oligomers in aggregate form - which gradually release the
     oligomer in soln..
DC
    A96 B04 C03 D21
IN
     CARTIER, N; DOMARD, A
PA
     (CNRS) CENT NAT RECH SCI
CYC
    16
PΙ
    WO 9208741
                   A1 19920529 (199224)* FR
                                              25p
                                                      C08B037-00
        RW: AT BE CH DE DK ES FR GB GR IT LU NL SE
         W: CA JP US
                   A1 19920522 (199230)
                                                      C08B037-08
     FR 2669340
                                               21p
ADT
    WO 9208741 A1 WO 1991-FR908 19911118; FR 2669340 A1 FR 1990-14690 19901119
PRAI FR 1990-14690
                      19901119
     5.Jnl.Ref; JP 62273905; JP 63185352; JP 63297305
REP
     ICM C08B037-08
IC
         A01N035-08; A01N043-16; A23L001-09; A23L001-29; A61K007-00;
     ICS
         A61K031-73; C07H005-06
          9208741 A UPAB: 19931006
AB
     Compounds comprising at least one glucosamine oligomer, having a
     relatively low degree of polymerisation (100 or less) which, in solution
     is a mixture of (i) an isomolecular aggregate which directly and
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physically combines multiples of the base oligomer, the total molecular
     mass of which is a multiple of the molecular mass of the base oligomer,
     and (ii) the base oligomer in non-aggregated form, are new.
          USE/ADVANTAGE - Glucosamine and its oligomers, usually in the form of
     chitosan and its deacetylated derivs., are known to be of use in
     epithelisation, esp. in parodontal tissue, the treatment of liver
     complaints, bone diseases, and also to treat plants to aid growth and
     increase their frost resistance. The new compositions serve as a source of
     glucosmaine which is released over a prolonged period and is not degraded
     or altered by the effects of various physical or chemical treatments.
     4/7
     CPI
     AB; DCN
     CPI: A12-V01; A12-W04C; B04-C02E3; C04-C02E3; B12-A07; C12-A07; B12-G02;
          C12-G02; B12-J08; C12-J08; B12-M10; C12-M10; B12-P04; C12-P04; D06-H;
          D08-A
                                             DERWENT INFORMATION LTD
L125 ANSWER 9 OF 13 WPIX
                            COPYRIGHT 2001
     1992-167087 [20]
                        WPIX
     1991-178042 [24]
    C1992-076823
     Acylated glucosamine(s) and oligoglucosamine(s) - are membrane components
     for liposome(s) for admin. of drugs.
     B03 B04 B07 D16
     FUJI, K; MIYAJIMA, K
     (NISB) JAPAN TOBACCO INC
                   A1 19920430 (199220)* JA
                                               a09
                                                     C07H013-06
     WO 9206987
        RW: AT DK ES GR
    WO 9206987 A1 WO 1990-JP1506 19901119
PRAI JP 1990-281988
                      19901022; JP 1990-281989
                                                 19901022
     3.Jnl.Ref; JP 61227586
     ICM C07H013-06
         A61K009-127; B01J013-02; C07H015-04
     ICS
     B01F017-56
          9206987 A UPAB: 19931006
     Glucosamines of formula (I) and their pharmaceutically acceptable salts
     are new, where R1 and R2 are each H or -CO(CH2)nMe (but are not both H); n
     is 10-22; R3 is H or lower (pref. 1-4C) alkyl; m is 0-3. Also claimed are
     liposomes contg. (I) as membrane component (pref. contg. 0.5-30 pts. wt.
     (I) and 100 pts. phospholipid).
          Specifically claimed, 6-0-Lauroyl, 6-0-myristoyl, 6-0-palmitoyl,
     6-O-stearoyl, 3,6-di-O- lauroyl, 3,6-di-O-myristoyl and
     3,6-di-O-stearoyl-D-glucosamine methyl glycoside and 6,6'-di-O-palmitoyl-D-
      glucosaminyl(1-4)-beta-D-glucosamine methyl glycoside.
          USE/ADVANTAGE - Effective admin. of a physiologically active
     substance (pref. an electrically neutral or anionic substance) liposome
     form; such as an anti-inflammatory, oxygen carrier, enzyme, antibiotic,
     hormone, or anticancer agent. The liposomes are especially useful for
     admin. of superoxide dismutase.
     0/0
     CPI
     AB; GI; DCN
     CPI: B02-Z; B04-B01B; B04-B02C; B04-B02D; B05-B01P; B07-A02; B12-D07;
          B12-G07; B12-M11F; D05-A01A3; D05-A01B1; D05-H10
                                              DERWENT INFORMATION LTD
L125 ANSWER 10 OF 13 WPIX
                             COPYRIGHT 2001
     1991-178042 [24]
                        WPIX
     1992-167087 [20]
     C1991-076852
     Novel glucosamine deriv. - has liposome as membrane component.
     B03 B04 B07 D16
     FUJI, K; MIYAJIMA, K
     (NISB) JAPAN TOBACCO INC
     12
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A 19910530 (199124)\* •

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PΑ CYC

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WO 9107416

DNC

IC

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RW: BE CH DE FR GB IT SE
         W: CA KR US
     JP 03218389
                     19910925 (199145)
                   Α
                                                                      <--
     EP 457910
                   Α
                     19911127 (199148)
                                                                      <--
         R: BE CH DE FR GB IT LI SE
     JP 04159216
                 A 19920602 (199228)
                                              11p
                                                      A61K009-127
                                                                      <--
     US 5304380
                   Α
                     19940419 (199415)
                                              15p
                                                      B01F017-56
                                                                      <--
     KR 9400166
                   B1 19940108 (199445)
                                                      C07H013-06
                                                                      <--
    JP 03218389 A JP 1990-281988 19901022; EP 457910 A EP 1990-916363
ADT
     19901109; JP 04159216 A JP 1990-281989 19901022; US 5304380 A Cont of US
     1991-720479 19910709, US 1992-895444 19920608; KR 9400166 B1 WO
     1990-JP1458 19901109, KR 1991-700727 19910709
PRAI JP 1989-289933
                      19891109; JP 1990-281988
                                                 19901022; JP 1990-281989
     19901022
     2.Jnl.Ref; JP 61227586; 1.Jnl.Ref
REP
     ICM A61K009-127; B01F017-56
IC
          A61K009-12; A61K037-52; A61K047-36; B01J013-02; C07H015-104
    A61K037-02; C07H013-06; C07H015-04
TCA
          9107416 A UPAB: 19930928
AΒ
     WO
     Glucosamine deriv. of formula (I) and its salts are new. R1 and R2 = H or
     CO(CH2)nCH3 but not both H; n = 10-22; R3 = H or lower alkyl, pref. 1-4C
     alkyl; m = 0-3. A liposome contg. (I) in the membrane is also claimed.
          USE/ADVANTAGE - The liposomes are useful for administering
     antiinflammatories, oxygen transport materials, antibiotics, hormones,
     anticancer agents, enzymes, etc., esp. the enzyme superoxide dismutase
     (SOD) (claimed). When SOD is administered directly into the blood stream,
     has a short half life, about 6 minutes. It is stabilised in the blood
     stream when incorporated in a liposome. Liposomes are formed using a
     phospholipid, usually lecithin, as the wall material. Other lipids can
     also be included. The wall can be given a cationic surface by
     incorporating e.g. stearyl amine.
     0/0
FS
     CPI
FΑ
     AB; DCN
MC
     CPI: B04-B01B; B04-B02C2; B05-B01P; B07-A02; B12-D03; B12-G07; B12-H05;
          B12-M11F; D05-A02A
ABEQ US
          5304380 A UPAB: 19940531
     6-0-alkanoyl- and 3,6-di-0-alkan oyl D-glucosamine glycosides of formula
     (I) and the nontoxic salts are new. R and R' are each H or 12-24C
     alkanoyl, and not both H; R'' is H or lower alkyl; and n is 0-3.
          USE/ADVANTAGE - Cpds. (I) are membrane constituents for liposome drug
     compsns. Cpds. (I) facilitate the formation of positively charge membrane
     components which exhibit strong adhesion to body cells and enhance the
     lifetime of a drug in-vivo.
     Dwg.0/0
L125 ANSWER 11 OF 13 WPIX
                             COPYRIGHT 2001
                                              DERWENT INFORMATION LTD
AN
     1990-240881 [32]
                        WPIX
DNC
     C1990-104114
     Microcapsules for cosmetic, pharmaceutical or food compsns. - prepd. using
TI
     soln. of atelo-collagen and poly holoside, e.g. glucosamine-glycan cpds..
DC
     ANDRY, M; BUFFEVANT, C; HUC, A; LEVY, M; ANDRY, M C; LEVY, M C
IN
PA
     (BIOE-N) BIOETICA; (COLE-N) COLETICA; (BIOE-N) BIOETICA SA
CYC
     19
                   A 19900808 (199032)*
                                                                      <--
PΙ
     EP 381543
         R: AT BE CH DE ES FR GB GR IT LI LU NL SE
                                                                      <--
     FR 2642329
                     19900803 (199038)
                   Α
                     19900809 (199039)
                                                                      <--
     AU 9048864
                   Α
                     19900731 (199042)
                                                                      <--
     CA 2009065
                   Α
     JP 02229111
                     19900911 (199042)
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                   Α
                                                                      <--
     AU 633866
                      19930211 (199313)
                                                      B01J013-16
                   В
     EP 381543
                   B1 19930526 (199321)
                                                      B01J013-10
                                                                      <--
                                         EN
                                               17p
         R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
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                                                      B01J013-10
    DE 69001683
                   E 19930701 (199327)
                   T3 19941101 (199444)
                                                      B01J013-10
                                                                      <--
     ES 2058827
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A 19950307 (199515)
     US 5395620
                                               9p
                                                     A61K009-50
                                                                      <--
     JP 2534921
                   B2 19960918 (199642)
                                              10p
                                                     A61K009-50
                                                                      <--
     US 5622656
                   A 19970422 (199722)
                                              10p
                                                     B01J013-16 .
                                                                      <--
     CA 2009065
                   C 19990824 (200001)
                                         EN
                                                     A61K009-50
                                                                      <--
     KR 163171
                   B1 19981201 (200032)
                                                     A61K009-50
                                                                      <--
ADT
    EP 381543 A EP 1990-400030 19900105; FR 2642329 A FR 1989-1221 19890131;
     JP 02229111 A JP 1990-21927 19901031; AU 633866 B AU 1990-48864 19900129;
     EP 381543 B1 EP 1990-400030 19900105; DE 69001683 E DE 1990-601683
     19900105, EP 1990-400030 19900105; ES 2058827 T3 EP 1990-400030 19900105;
     US 5395620 A CIP of US 1989-336711 19890412, Cont of US 1991-749909
     19910826, US 1993-74701 19930608; JP 2534921 B2 JP 1990-21927 19900131; US
     5622656 A CIP of US 1989-336711 19890412, Cont of US 1991-749909 19910826,
     Div ex US 1993-74701 19930608, US 1994-328903 19941025; CA 2009065 C CA
     1990-2009065 19900131; KR 163171 B1 KR 1990-1111 19900131
FDT AU 633866 B Previous Publ. AU 9048864; DE 69001683 E Based on EP 381543;
     ES 2058827 T3 Based on EP 381543; JP 2534921 B2 Previous Publ. JP
     02229111; US 5622656 A Div ex US 5395620
PRAI US 1989-336711
                      19890412; FR 1989-1221
                                                 19890131
     2.Jnl.Ref; EP 273823; FR 2267150
     ICM A61K009-50; B01J013-10; B01J013-16
IC
          A23L001-00; A23P001-04; A61K007-00; A61K009-52; A61K047-36;
          A61K047-42
           381543 A UPAB: 19970502
AΒ
     EΡ
     The use of a soln. of atelocollagen and polyholosides, eg.
     glycosaminoglycans (GAGs) for the mfr. of microcapsules which pref.
     contain an active principle, esp. of the cosmetic, pharmaceutical or
     edible type, is claimed. Also claimed are microcapsules which comprise a
     mixed wall of crosslinked ateocollagen and polyholosides, eg. GAGs.
          The GAGs may be eg. chondroitin 4-sulphate, chondroitin 6-sulphate,
     dermatan sulphate, heparan sulphate, keratan sulphate or heparin. In the
     prepn. of the microcapsules, there may be used a crosslinking agent, eg.
     terephthaloyl chloride, citric acid or succinic anhydride, a hydrophobic
     liquid, eg. cyclohexane or CHCl3, a buffer soln. for dissolving
     polyholosides contg. eg. NaOH, Na2CO3, Sodium acetate, sodium citrate or
     sodium and potassium phosphates and a soln. for dissolving the
     atelocollagen, eg. aqs. 0.1M acetic acid.
          USE/ADVANTAGE - The microcapsules by virtue of the presence of
     atelocollagen have very low antigenicity and perfect biodegradability. In
     pharmaceutical compsns., the microcapsules make it possible, when
     administered orally, to mask the taste of the active principle and to
     provide protection in the stomach or produce a delayed effect by virtue of
     resistance to the gastric juices. The microcapsules also make it possible
     to protect delicate substances such as essential oils which may form part
     of a compsn. of foods. @(16pp Dwg.No.0/1)
FS
     CPI
FA
     AB; DCN
MC
     CPI: B03-F; B04-B01C; B04-B04A6; B04-C02E; B04-C02E2; B12-J01; B12-M10B;
          B12-M11E; D08-B01; D10-A05A
ABEQ EP
           381543 B UPAB: 19931114
     Use of a solution of atelocollagen and polyholosides, for example
     glycosaminoglycans, for the manufacture of microcapsules which preferably
     contain an active principle, especially of the cosmetic, pharmaceutical or
     edible type.
     Dwg.0/0
ABEQ US
          5395620 A UPAB: 19950425
     Microcapsule comprises a cross-linked outer wall surrounding a filled
     inner space, the outer wall resulting from crosslinking between mols. of
     atelo collagen (ATC) and polyholoside. Opt. the microcapsule contains an
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The polyholoside is pref. a glycosaminoglycan esp. chondroitin 4- or 6-sulphate, dermatan sulphate, heparin sulphate, keratan sulphate or heparin (of mol. wt. 2000-10000). The filled inner space comprises a mixt. of ATC and polyholoside.

active cpd. such as a cosmetic, pharmaceutical or food cpd.

USE/ADVANTAGE - The microcapsules are biocompatible by virtue of the presence of atelo collagen which has the advantageous properties of collagen such as very low antigenicity, and biodegradability and are

suitable for mfr. of cosmetic, pharmaceutical or food compsns. Dwg.0/1

ABEQ US 5622656 A UPAB: 19970530

A process for the manufacture of microcapsules, which comprises the following successive steps:

- (a) preparing a solution of atelocollagen,
- (b) preparing a solution of polyholoside by dissolving the polyholoside in an aqueous buffer solution whose pH is adjusted so that, after mixing with the solution of atelocollagen, the pH of the mixture is between 5.5 and 10,
- (c) mixing the solution of atelocollagen with the solution of polyholoside to form a homogeneous solution of atelocollagen and polyholoside having a pH between 5.5 and 10,
- (d) forming an emulsion with the solution of atelocollagen and polyholoside, as a dispersed phase in a hydrophobic liquid forming the continuous phase, in which the atelocollagen and the polyholoside are essentially insoluble, and
- (e) mixing a crosslinking solution of a crosslinking agent containing reactive groups capable of simultaneously reacting with acylatable groups of the atelocollagen and the polyholoside with the resulting emulsion, thereby causing an interfacial and simultaneous crosslinking reaction of the atelocollagen and of the polyholoside, for a period of time sufficient to form microcapsules comprising a crosslinked outerwall surrounding a filled inner space, said outerwall resulting from a crosslinking between molecules of atelocollagen and polyholoside.

  Dwg.1/1

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L125 ANSWER 12 OF 13 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD
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AN 1982-82124E [39] WPIX

TI Prolonged release pharmaceutical compsns. - comprising in vivo decomposing chitin membrane enveloping the medicine.

DC B04 B07

PA (NIRA) UNITIKA LTD

CYC 1

PI JP 57134412 A 19820819 (198239)\* 4p <--JP 01009962 B 19890221 (198911) <--

ADT JP 57134412 A JP 1981-20759 19810212

PRAI JP 1981-20759 19810212

IC A61K009-00; A61K047-00

AB JP 57134412 A UPAB: 19930915

Prolonged release pharmaceuticals consist of an in vivo decomposing chitin membrane as drug releaser and a drug (mixt.) enveloped in the membrane. The chitin membrane is pref. in form of hollow fibre.

Prepns. may be applied locally to the affected part, from which the drug is released continuously and constantly over a long period of 24 hrs. to 3 months. There is little side effect. The chitin membrane is pref. poly-(N-acetyl-D-glucosamine)s or their derivs. obtd. from crustaceans or insects by isolating proteins and Ca component on treatment with HCl and NaOH. The chitin derivs. mean ether, ester, carboxymethyl, hydroxyethyl or O-ethyl cpds., for example, poly(N-acetyl-6-O- (2'-hydroxyethyl)-D-glucosamine), poly(N-acetyl-6-O- (ethyl)-D-glucosamine), etc. The drugs to be enveloped include proteins (e.g. insulin), antimicrobials (e.g. penicillins, cephalosporins, polymixin B), antitumour agents (e.g. sarkomycins, bleomycins, mitomycin C), ophthalmic agents (e.g. tetracycline, chlorotetracyclines, neomycins) and steroidal contraceptives.

FS CPI

FA AB

MC CPI: B04-C02; B12-M10

L125 ANSWER 13 OF 13 WPIX COPYRIGHT 2001 DERWENT INFORMATION LTD

AN 1975-57456W [35] WPIX

TI Poly(N-acetyl-D-glucosamine)derivs. as degradable carrier for drugs - in slow release prepns. e.g. ocular insert or intrauterine pessary.

DC A96 B07 P32

PA (AMCY) AMERICAN CYANAMID CO; (CAPO-I) CAPOZZA R C

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CYC
    15
     DE 2505305
                   A 19750821 (197535) *
                                                                        <--
PΙ
                      19750811 (197535)
                                                                        <--
     BE 825367
                   Α
     NL 7501365
                   Α
                      19750813 (197535)
                                                                        <---
                                                                        <--
     US 3911098
                   Α
                      19751007 (197542)
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     SE 7501464
                   Α
                      19751006 (197544)
                      19751010 (197548)
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                      19750929 (197548)
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     ZA 7500472
                   Α
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     GB 1499751
                   Α
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                      19780831 (197839)
                                                                        <--
     CA 1045975
                   Α
                      19790109 (197905)
                                                                        <--
     IT 1036866
                   В
                      19791030 (198007)
                                                                        <--
     CS 7500860
                   Α
                      19800915 (198101)
                                                                        <--
     RO 68711
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                      19800515 (198124)
PRAI US 1974-441695
                       19740211
     A61F005-46; A61F009-00; A61K009-22; A61K027-12; A61K031-41; A61K047-00
IÇ
          2505305 A UPAB: 19930831
AB
     An enzymatically degradable, bioerodable camer (I) for the release of a
     drug administered to a live mammal consists of a matrix of an
     enzymatically degradable form of poly(N-acetyl-D-glucosamine) (II) in
     which a drug, which is at least slightly water soluble, is intimately
     dispersed. (I) is used as a slow release prepn. for administering drugs
     in the form of an implant. The time of release varies from e.g. a few
     minutes in the case of an ocular insertion to 6-12 months for an intra
     uterine pessary used to prevent conception. The form of (I) is chosen
     with regard to the site where it will be used. e.g. to treat the eyes with
     such drugs as antibiotics, anti-allergics or antiinflammatory agents,
     miotics (esp. pilocarpine), (I) is shaped such that it can be inserted in
     the conjuctival sac. The amount of drug used per implant is e.g. 1\ \mathrm{ug} - 1\ \mathrm{ug}
     mg. depending on the treatment. The drug is released by enzyme
     degradation of (I) esp. by lysozyme.
FS
     CPI GMPI
FA
     AB
MC
     CPI: A03-A; A12-V01; B04-C02; B11-C04; B12-E09; B12-L04; B12-M10
=> d his
     (FILE 'HOME' ENTERED AT 12:32:22 ON 25 JUN 2001)
                SET COST OFF
     FILE 'REGISTRY' ENTERED AT 12:35:30 ON 25 JUN 2001
L1
              1 S N-ACETYL-D-GLUCOSAMINE/CN
                E C8H15NO6/MF
L2
             27 S E3 AND GLUCO? AND ACETYLAMINO AND DEOXY
             16 S L2 NOT (11C# OR 13C# OR 14C# OR C11# OR C13# OR C14# OR 18O#
L3
L4
              7 S L3 AND 2
              7 S L1, L4
L5
                E GLUCOSAMINE/CN
L6
              1 S E3
                E C6H13NO5/MF
L7
             39 S E3 AND GLUCO? AND AMINO AND DEOXY
             19 S L7 NOT (11C# OR 13C# OR 14C# OR C11# OR C13# OR C14# OR 18O#
r_8
              8 S L8 AND 2
Ь9
              6 S L9 NOT NC5/ES
L10
              5 S L10 NOT OC4/ES
L11
              5 S L6, L11
L12
                SEL RN
            168 S E1-E5/CRN
L13
             21 S L13 AND CLH
L14
              4 S L14 AND 2/NC
L15
             15 S L13 AND H2O4S
L16
              6 S L14 AND L16
L17
```

4 S L17 NOT (C6 OR OC4)/ES

L18

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4 S L16 AND 2/NC
L19
L20
             20 S L5, L12, L15, L19
L21
              6 S 9004-34-6 OR 9004-65-3 OR 9004-62-0 OR 9004-64-2 OR 9000-11-7
     FILE 'HCAPLUS' ENTERED AT 12:46:27 ON 25 JUN 2001
L22
           8769 S L20
     FILE 'REGISTRY' ENTERED AT 12:46:39 ON 25 JUN 2001
                SEL L20 RN
            355 S E6-E25/CRN
L23
L24
             66 S L23 AND PMS/CI
              7 S L24 AND ("(C6H13NO5.C6H12O6)X" OR "(C6H13NO5)X" OR "(C8H15NO6
L25
L26
              5 S L25 NOT (251985-81-6 OR 150481-75-7)
     FILE 'HCAPLUS' ENTERED AT 12:54:41 ON 25 JUN 2001
L27
             99 S L26
L28
           8851 S L22, L27
     FILE 'HCAPLUS' ENTERED AT 12:54:52 ON 25 JUN 2001
     FILE 'REGISTRY' ENTERED AT 12:54:55 ON 25 JUN 2001
L29
              0 S L13 AND 9004-34-6/CRN
     FILE 'HCAPLUS' ENTERED AT 12:55:09 ON 25 JUN 2001
                E LEINER/PA,CS
L30
              9 S E3-E12
                E KAY R/AU
L31
             20 S E3, E4
                E KAY ROB/AU
L32
             34 S E3-E6
                E THOMAS L/AU
            229 S E3,E16-E18
L33
                E THOMAS LARRY/AU
L34
              8 S E3, E9
                E THOMAS LAWRENCE/AU
L35
              2 S E3
                E BOUGU B/AU
                E BOGUE B/AU
L36
              8 S E4, E5, E6
              0 S L28 AND L30-L36
L37
L38
              0 S L30-L36 AND ?GLUCOSAMIN?
            118 S L21 AND L28
L39
           1369 S (L28 OR ?GLUCOSAMIN?) AND (L21 OR ?CELLULOS?)
L40
             31 S (L28 OR ?GLUCOSAMIN?) AND (HPMC OR HEC OR HPC OR CMC OR NACMC
L41
           1386 S L39-L41
L42
                E PHARMACEUTICAL DOSAGE/CT
                E E4+ALL
              9 S E1 AND L42
L43
                E E2+ALL
             14 S E2 AND L42
L44
L45.
             20 S L42 AND E2+NT
              9 S L42 AND (CONTROL? OR SUSTAIN?) (L) RELEAS?
L46
             34 S L43-L46
L47
             26 S L47 AND (1 OR 63)/SC, SX
L48
             11 S L48 AND (?TABLET? OR ?CAPSUL?)
L49
L50
              7 S L49 AND L28
              6 S L49 AND L21
L51
L52.
              8 S L50, L51
              8 S L47 NOT L48
L53
              2 S L53 AND 9/SC
L54
L55
              1 S L54 NOT 111:36238/DN
             26 S L48 NOT L53
L56
                SEL DN 5 11-18 20 22
L57
             11 S E1-E11
L58
             17 S L52, L55, L57 AND L28, L30-L56
             11 S L58 AND (?LOZENG? OR PASTIL? OR ?TABLET? OR ?CAPSUL? OR ORAL?
L59
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L60
             17 S L58, L59
             97 S L28 AND (CONTROL? OR SUSTAIN?) (L) (RELEAS? OR ACTION?)
L61
                E PHARMACEUTICAL DOSAGE/CT
L62
             55 S E4 AND L28
                E E4+ALL
                E E2+ALL
            120 S L28 AND E2, E8-E18, E49-E56, E62-E64, E73-E75, E82-E89, E92
L63
             24 S L28 AND E8-E18, E49-E56, E62-E64, E73-E75, E82-E89, E92
L64
             24 S L63 AND L64
L65
L66
             18 S L61 AND L62-L65
              6 S L62 AND L61, L64
L67
L68
             37 S L65-L67
L69
             50 S L60, L68
     FILE 'REGISTRY' ENTERED AT 13:21:11 ON 25 JUN 2001
L70
              1 S 9007-28-7
     FILE 'HCAPLUS' ENTERED AT 13:21:15 ON 25 JUN 2001
            127 S L28 AND L70
L71
             11 S L71 AND L69
T<sub>1</sub>72
L73
             23 S L71 AND L61-L64
             63 S L69, L72, L73
L74
              3 S L74 AND (BLOOD OR SERUM OR PLASMA)/CW
L75
             60 S L74 NOT L75
L76
L77
            486 S L28 AND (?INSULIN? OR ?DIABET? OR ?INFLAMM? OR ?ARTHRIT?)
             70 S L77 AND L61-L65
L78
L79
             22 S L78 AND L76
             60 S L76, L79
L80
             48 S L78 NOT L80
L81
             16 S L81 AND 63/SC
L82
              9 S L82 NOT (PAIN OR VASCULAR OR SKIN OR BIOACTIVE OR PANTHOTHENI
L83
              7 S L83 NOT (PANTOTHENIC OR ACON?)/TI
L84
L85
             49 S L80 AND 63/SC
             41 S L85 NOT (HERPES OR XANTHAN OR ADRIAMYCIN OR CARNITINE OR METH
L86
             38 S L86 NOT (SKIN OR CELLULITE OR METHION?)/TI
L87
L88
             36 S L87 NOT (WRINKLE? OR VIRAL)/TI
             43 S L84, L88
L89
L90
             11 S L80 NOT L85
              8 S L90 NOT (VIRUS OR DEXTRAN OR FETAL)/TI
L91
L92
             51 S L89, L91
                 SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 13:37:00 ON 25 JUN 2001
L93
             14 S E1-E14
     FILE 'REGISTRY' ENTERED AT 13:37:09 ON 25 JUN 2001
     FILE 'HCAPLUS' ENTERED AT 13:37:20 ON 25 JUN 2001
     FILE 'MEDLINE' ENTERED AT 13:37:57 ON 25 JUN 2001
L94
           9099 S L20 OR L26
                E GLUCOSAMINE/CT
                E E3+ALL
L95
           8701 S E6+NT
L96
           9099 S E6, E13/CT, CN
             96 S L96 AND (CONTROL? OR SUSTAIN?) (L) RELEAS?
L97
              2 S L97 AND (CONTROL? OR SUSTAIN?)()RELEAS?
L98
L99
              1 S 97155121/DN AND L98
     FILE 'MEDLINE' ENTERED AT 13:44:18 ON 25 JUN 2001
             45 S L21 AND L96
L100
          15974 S CELLULOSE+NT/CT
L101
          10443 S CELLULOSE/CT, CN
L102
             56 S L96 AND L101,L102
L103
            327 S L96 AND ?CELLULOS?
L104
              2 S L97 AND L100, L103, L104 •
L105
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FILE 'WPIX' ENTERED AT 13:47:19 ON 25 JUN 2001
L106
           1540 S ?GLUCOSAMINE? OR ?GLUCOSE AMINE?
L107
           1158 S 0615/DRN OR R00615/DCN
                E GLUCOSAMINE/DCN
                E E3+ALL
             22 S E4
L108
              2 S E6
L109
                E N-ACETYL-D-GLUCOSAMINE/DCN
                E N-ACETYLGLUCOSAMINE/DCN
                E ACETYLGLUCOSAMINE/DCN
                E E4+ALL
L110
             96 S E2
           2724 S L106-L110
L111
             26 S L111 AND (R051 OR R0'2)/M0,M1,M2,M3,M4,M5,M6
L112
             21 S L111 AND (B12-M10? OR C12-M10?)/MC
L113
             4 S L111 AND A61K009-52/IC
L114
             23 S L111 AND (V711 OR V712 OR V713 OR V714)/M0,M1,M2,M3,M4,M5,M6
L115
              6 S L111 AND (R15976 OR R01859 OR R03005 OR R01835 OR R06717 OR R
L116
              6 S L111 AND (1859 OR 1835)/DRN
L117
             54 S L112-L117
L118
             12 S L118 AND (B12-M11? OR C12-M11?)/MC
L119
             3 S L118 AND R038/M0, M1, M2, M3, M4, M5, M6
L120
             13 S L119, L120
L121
                SEL DN PN 3 7 8 9
L122
              4 S E1-E31
L123
             42 S L118 NOT L119
                SEL DN PN 8 10 15 17 21 23 27 40 42
L124
              9 S E32-E75
L125
             13 S L122, L124
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FILE 'WPIX' ENTERED AT 13:55:54 ON 25 JUN 2001

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